IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF MISSISSIPPI
OXFORD DIVISION

CIVIL ACTION NO. 3:17-cv-060 DMB-RP

KELLI DENISE GOODE, Individually, and also as the Personal Representative of Troy Charlton Goode, Deceased, and as Mother, Natural Guardian, and Next Friend of R.G., a Minor, and also on behalf of all similarly situated persons,

Plaintiff,

vs.

THE CITY OF SOUTHAVEN, TODD BAGGETT, Individually, JEREMY BOND, Individually, TYLER PRICE, Individually, JOEL RICH, Individually, JASON SCALLORN, Individually, STACIE J. GRAHAM a/k/a WITTE, Individually, MIKE MUELLER, Individually, WILLIAM PAINTER, JR., Individually, BRUCE K. SEBRING, Individually, JOSEPH SPENCE, Individually, RICHARD A. WEATHERFORD, Individually, JOHN DOES 1-10, BAPTIST MEMORIAL HOSPITAL - DESOTO, a Mississippi Corporation, SOUTHEASTERN EMERGENCY, INC., a Tennessee Corporation, and LEMUEL DONJA OLIVER, M.D.,

Defendants.

DEPOSITION OF MICHAEL F. ARNALL, MD

BE IT REMEMBERED that on, to wit, the 19th day of October, 2017, this matter came on for the taking of the deposition of **MICHAEL F. ARNALL, MD**, before Sherry L. Rowe, Certified Shorthand Reporter, a Registered Merit Reporter, Registered Professional Reporter, and Notary Public of ANIMAS REPORTING SERVICE, 919 County Road 142, Durango, Colorado 81301, taken at the DoubleTree by Hilton, San Juan Conference Room, 501 Camino del Rio, Durango, Colorado 81301, at the hour of 8:52 a.m.

A P P E A R A N C E S

FOR THE PLAINTIFF:

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MICHAEL F. ARNALL, MD,

was called as a witness by the Defendant Oliver, and having been first duly sworn, testified upon his oath as follows, to wit:

EXAMINATION

BY MR. PHILLIPS:

Q State your name, please.

A Michael Frank Arnall, A-R-N-A-L-L.

Q Dr. Arnall, I'm Marty Phillips. We met a short time ago. And I am one of the attorneys, along with Mr. Gass, who's here today, representing Dr. Oliver, one of the Defendants in this case.

You understand that you have been disclosed by the Plaintiff as an expert witness who may testify in this case, right?

A Yes.

Q And you understand that that's the purpose for which we're here to take your deposition today?

A Yes.

Q I was advised by Mr. Edwards' paralegal this week that you required a thousand-dollar payment for the deposition; is that right?

A Yes.

Q Here's a thousand-dollar check from my firm to you.

A Thank you.

Q Your area of specialty is what?

A Forensic pathology. I'm board-certified in anatomic pathology, clinical pathology, and forensic pathology.

Q Is that the only area of expertise that you hold?

A In previous court appearances, I've been qualified to express an opinion as a licensed physician in the practice of medicine.

So, in -- in -- in response, while I'm board-certified in those three specialty areas, obviously I'm a licensed physician. I've been a laboratory director at several different facilities. So I've testified in those areas of medicine that a laboratory director would be consulted by other physicians. And that, you know, from time to time includes laboratory testing and endocrinology or hematology.

I did a separate forensic -- separate fellowship in surgical pathology, which is that specialty which attends to the issue of everything you'd receive from the operating room, but in particular morphologic appearance of cancers and infectious diseases.

But predominantly in forensic pathology and all the areas of training in forensic pathology. Obviously, there's training in toxicology, because that's one of our fundamental aspects; training in trauma that humans receive, you know, as a cause of their death. So there's multiple disciplines.

As a forensic pathologist, we determine cause and

manner of the death. And the cause of death could be essentially anything you see in an index of a -- of a medical textbook.

Q When is the last time you provided care to a living patient?

A 2004 and prior to that. In 2005, I went to essentially all forensic pathology.

(Short interruption in deposition, hotel staff person entering, short discussion.)

Q (BY MR. PHILLIPS) When is the last time you have worked as an emergency room physician?

A I've never worked as an emergency room physician. I might make one comment with respect to the previous question. On occasion, I'm consulted by district attorneys here in Colorado to evaluate patients who received injuries but who are not dead yet.

So, strictly speaking, that's not treating the patient. But, you know, in an abundance of caution, I will disclose that, yes, I have seen patients who aren't dead. And that's because prosecuting attorneys have asked me to evaluate injuries in patients who did not receive lethal injuries.

Q You are not going to be offering opinions on the standard of care required of an emergency room physician, are you?

A I -- in candor, I seriously doubt that Plaintiff's

attorney will ask me, and I seriously doubt a judge would allow me to express an opinion.

On the other hand, I do have textbooks which address some of the -- those issues which you've just stated. I'm well aware that I neither practiced as an emergency room physician nor trained as, other than being in an emergency room as a -- as a -- in training. And so I seriously doubt my opinion would be accepted by a court or even allowed to be expressed.

Although, I would say that, in evaluating this case, I have read the opinions expressed about the standard of care. Much of it I'm aware of, just because I've spent, you know, decades in medicine.

Some of the issues I have looked up in -- in texts because they -- they sounded to be divergent from what I had experienced.

And part of that is -- is -- goes under the rubric of evaluating the credibility of other medical opinions, which I inevitably read regarding this case. Although, candidly, I seriously doubt a judge will allow me to express an opinion. I did evaluate the opinion of other physicians. I just seriously doubt anyone is going to allow me to express an opinion in a court of law. But have I looked at it? Have I evaluated it? Yes, I have.

Q Well, that really wasn't my question, whether you've looked at it.

My question is: You're not going to try to offer opinions on what the standard of care requires of an emergency room physician in this case, are you?

A Oh. That is not in my report, and I will not be issuing that opinion in --

Q Okay.

A -- in the courtroom. However, I understand it may well come up in this deposition. I just suspect it won't be allowed in -- in open court. And it's certainly not -- as you know, it's not in my report.

Q It's not in your report, and it's not an area of medicine in which you have experience practicing, and it's not an area in which you hold yourself out as an expert, correct?

A I will not hold myself out as an expert to the court; that is correct. But I suspect we're going to be discussing it today.

Q Okay. Did you tell me that you'd never worked as an emergency room physician?

A I never worked as an emergency room physician. Although, as you might surmise, as a laboratory director, I'm called from time to time, prior to my -- prior to 2005, to either see laboratory results of -- of patients in the emergency room or from time to time actually look at a patient in an emergency room by an emergency room physician.

But I myself am not board-certified, have no

internship or residency in emergency room training, do not hold myself out to be an expert.

Q Okay. Thank you. Are you aware that there is another forensic pathology expert the Plaintiff has identified in this case, Dr. Cyril Wecht?

A I am. I've read his report, and I brought his report in the package of hard copies that I have received. And I have it.

Q Did you read his Autopsy Report or just his Rule 26 report in this case?

A Under Plaintiff's Tab 10 of the package I received, I have a December 5, 2016, letter from Cyril Wecht to Dr. Edwards (sic), that has a "Clinical Summary," a "Post-Mortem Examination," and an "Opinion." It has toxicology results.

And I also brought with me today a package of glass slides that I received, and they are labeled CHW, which I interpret as Cyril H. Wecht. 15-275 with the name T. Goode. And I'm going to hand those over to you for your inspection.

Q Did you review Dr. Wecht's deposition?

A I don't recall reviewing his deposition.

Q Have you been provided with any of the exhibits that were marked in his deposition?

A Other than what I've told you so far, I don't recall that I have.

Q Do you have any disagreements with Dr. Wecht's opinion as expressed in the letter to Mr. Edwards that he wrote, that you just referenced?

A I don't disagree with anything that he has stated. If you were to compare and contrast my report with his, you would see that I had added the issue of the Ativan and Haldol in my evaluation of substances which exacerbated the problems of the decedent. I don't know if you call that a disagreement, but you're gonna see that they're not the same.

Q Dr. Wecht did not at all implicate Haldol or Ativan as a cause of Mr. Goode's death, right?

A That -- and that is why I have specifically highlighted that difference between our reports.

Q So do you discern that there's disagreement between the two of you on the issue of the involvement of Haldol and Ativan?

A I suppose that's a matter of semantics. That I know of, he hasn't specifically disputed it. So I don't know that there is a discrepancy. But I clearly have disclosed to you that our opinions are not identical, insomuch as I have implicated those two substances, and he has not. And that's fair to say.

Q Do you think a reasonable forensic pathologist could evaluate this case and conclude that Haldol and Ativan played no role in Mr. Goode's death?

A I do not. I believe that a reasonable forensic pathologist would have to agree that Ativan, in particular, could reasonably have contributed to the death of this individual.

Q Can reasonable forensic pathologists disagree on the cause of a particular person's death?

A Yes.

Q Did you know that Dr. Wecht had been deposed in this case?

A I don't recall if I knew that he had a deposition. I knew that he had a report.

Q Did you know that he had an Autopsy Report that he did outside of the Rule 26 Report provided to Mr. Edwards in this case?

A I don't recall that specifically, no. This is what I have. And I didn't inquire any further, I don't believe.

Q The slides that you have, the glass slides, are all prepared by Dr. Wecht?

A I believe they all carry his initials.

Q The "CHW" designation that you mentioned earlier?

A That is correct.

Q Have you reviewed any glass slides prepared by anybody else?

A I have not.

Q Do you know if there are any others available?

A I know that the Barnhart autopsy indicates there's a microscopic exam. So I essentially know that such glass slides do exist. I have not seen them.

Q You have not evaluated the Barnhart glass slides; is that correct?

A That is correct.

Q For purposes of identifying the slides that you had reviewed on the record, can we sometime after today make a photocopy of those slides and attach that paper copy as an exhibit? Would that be a reasonable way to identify the slides?

A Yes, it is. It is a traditional way to identify them.

Q Let's make the photocopy of the glass slides you reviewed Exhibit 1 to your deposition.

A And I suspect we can do that at this facility today.

Q Okay. Whatever we need to do to accommodate that, we will.

A I suspect their business office has the ability to do that.

MR. GASS: Could I see the box of slides, please?

THE WITNESS: (Complying.) It's possible you could take a picture of them with a smartphone.

Q (BY MR. PHILLIPS) You actually reviewed the slides,

a photo of which we've marked as Exhibit 1?

A Yes.

Q Was there anything that you could discern on the slides that led you to reach a conclusion as to cause of death in this case?

A In the sense that sometimes what one does not see can be as important as what one does see. I will tell you that I specifically looked for microscopic morphological criteria for asthma, insomuch as this patient does have a history of asthma.

There are five particular findings that a forensic pathologist would look at under the microscope for -- with the intent of determining whether asthma contributed significantly to death.

Those include eosinophils, mucous plugging of airways, smooth muscle hyperplasia around the bronchi, that sometimes gives a festooned or serpiginous appearance to the mucosa, hyperplasia of mucous glands and wide-mouthed mucous glands. I saw none of those findings in these slides.

So I did have a specific intent, when I looked at these slides, and that was to evaluate the possibility of a significant contribution of asthma. And while asthma may have contributed, I saw none of the compelling findings that I've just outlined that one frequently sees in asthma deaths.

Q So, from the perspective of a forensic pathologist, you saw no evidence on the glass slides of asthma in Mr. Goode;

is that right?

A Correct.

Q And, therefore, you have no basis to say that asthma caused or contributed to his death; is that right?

A Well, I'll disagree with that only because the forensic pathologist takes both a history and physical exam.

A physical exam in this instance is the microscopic examination, but the history of this patient is reactive airway disease.

So, even in the absence of physical findings, a physician is obligated to attend to the history. And this history does include reactive airway disease.

Q You're aware that that history exists, but you didn't find evidence of that disease at autopsy?

A That is correct.

Q Okay. You did not have the opportunity to do a gross inspection of Mr. Goode's organs or body, did you?

A Correct.

Q Now, aside from looking for asthma or evidence of asthma on these glass slides that we've marked as Exhibit 1, did you look for other abnormalities?

A Yes.

Q Did you find any abnormalities in these slides?

A No.

Q Is there anything in these glass slides that you've

analyzed that would lead you to a particular cause of death for Mr. Goode?

A There are no positive findings. However, in medicine, one uses different types of tests to either include or exclude entries into the differential diagnosis, that list of the different diagnoses that may explain the disease process one is examining.

In this instance, for instance, the absence of criteria for asthma death allows me to reasonably exclude that as one of the major contributors to death.

In that sense, it does allow me to narrow the differential diagnosis and come to a conclusion. But there are no positive findings which point me to a specific disease process.

It is the negative findings, the findings which are absent, which allow me to exclude disease processes and thus reach an answer.

So I -- I understand that one person who asks that question might have meant to say: "Well, are there any positive findings which gave you the answer?"

And the answer is "No." But negative findings do allow me to reasonably exclude possibilities.

Q Can one see evidence of a cardiac arrhythmia on pathology slides, such as you've reviewed?

A The arrhythmia itself is an electrical phenomenon and

cannot be seen on a glass side. Although, there may be morphological correlates, morphological findings which suggest the possibility of arrhythmias based on our understanding, for instance, of cardiac, normal and abnormal, appearance of myocardium.

In this instance, however, I saw no abnormal findings of the myocardium. So I could not see an arrhythmia because it's an electrical phenomenon, and I saw no morphological correlates which suggested that an arrhythmia might occur just based on the appearance of the myocardium.

Q Can one see evidence of pulmonary compromise on glass slides done at autopsy?

A The pulmonary function tests are not seen on glass slides. But one can see, for instance, mucous plugging in another case, which would allow me to reasonably conclude that, because the airways are plugged with mucous, that the pulmonary function will inevitably be compromised.

So I can see morphological correlates which allow me to conclude that those tests would be abnormal. But, of course, pulmonary function tests themselves are not tests that are seen on glass slides.

Q Was there any evidence of any pulmonary compromise when you looked at these slides?

A I saw no morphologic correlates which would suggest that there was any underlying, acute or chronic, pulmonary

disease.

Q You have indeed read not only Dr. Barnhart's Autopsy Report, but also Dr. Barnhart's deposition that Mr. Edwards took a few weeks ago, correct?

A Correct.

Q Dr. Barnhart did not implicate Haldol and Ativan as playing a role in Mr. Goode's death, did she?

A I am aware of that. That is correct.

Q There's no mention of that as a cause of death in her Autopsy Report, is there?

A I agree with that statement.

Q And if you read her deposition, you saw that Mr. Edwards asked her that precise question, and she expressed the opinion that Haldol and Ativan did not contribute to Mr. Goode's death. Did you see that?

A I am aware that is true.

Q It would appear that she and Dr. Wecht are in agreement on that issue; is that right?

A I understand she specifically disputes it. I don't know whether Dr. Wecht specifically disputes it. That is to say, if you were -- if he -- if the question was posed to him, I do not know what his response would be.

Q We know that he didn't include it in the report that you've seen?

A That I'm aware of. And, obviously, before this

litigation is finished, someone is going to ask him.

Q Wouldn't a forensic pathologist normally list in a report those things that he or she believed contributed to the cause of death?

A There are lumpers and splitters. Those are the terms that we use in medicine. Some individuals are more terse in their opinion. Some are more verbose.

If he thought it was significant, I agree with you he would've included it. It is possible that, when you ask him, "Could it have contributed?" he may well consider that it was a possibility. That's speculation. I don't know. I haven't asked him yet.

But I would say to you, to be prepared, that he might agree, "Well, it might have contributed, but it may not have been significant." I don't know what he's going to say.

But if he thought it was an important part of the cause of death, then I agree with you. He would've included it.

Q With regard to your opinion pertaining to Haldol and Ativan, is it your opinion that it may have contributed but was not significant?

A By way of completeness, I'm going to give you a slight more verbose answer. The onset action for IV Ativan, lorazepam, is about 15 minutes. This individual received that intravenous injection at about eight minutes after.

Some fifteen minutes later, they had received bicarbonate in resuscitation. The estimate by the police officer was about ten minutes. In looking back at the medical record, it looks like it was less than 15 minutes.

So I believe that the period of time between the intravenous injection of lorazepam and the cessation of respiration was somewhere between 10 and 15 minutes. That is about the time of onset of an intravenous injection of lorazepam. Lorazepam is a well-known respiratory depressant.

In a person who has obvious metabolic acidosis from the rough equivalent of prolonged isometric exercise -- and by that, I mean the hogtying, the struggle -- and who is assuredly in some state of exhaustion from this prolonged struggle, I believe it is reasonable to conclude that a respiratory depressant, which is lorazepam, acting in its published time frame of action, and understanding that there is some biologic variability, I believe it is reasonable to conclude that this respiratory depressant at the least contributed, if not significantly contributed, to the respiratory distress and ultimate cessation of respirations that this patient experienced.

Q My question was whether you have concluded that Haldol and Ativan may have contributed to his death, but it can't be determined with certainty? Is that your position?

A No, I tell you that lorazepam is a respiratory

depressant. I tell you that the time frame from the administration of this lorazepam to the cessation of respirations is the time frame that is published as the time frame -- the time it took for this person to get the injection and stop breathing is the published time frame of the action of lorazepam from an intravenous injection. I find that temporal relationship to be compelling. I believe it contributed. That is my opinion.

Q But temporal association is not the same as causation, though, is it?

A In forensic pathology, we believe in strict linkage. And in evaluating strict linkage of causality, temporal relationships are one of the criteria we use to assess causal relationships.

And I -- I believe we -- we actually specifically believe that in either Vern Adams' chapter in "Medicolegal Investigation of Death" or Dolinak's discussion of strict linkage in "Forensic Pathology."

Q Is temporal association different than causation?

A Temporal association is a criteria for assessing causation.

Q Just because there's a temporal association does not mean that there is cause and effect, though, right?

A I agree with that statement.

Q Okay. Is it your opinion that Haldol played any role

in Mr. Goode's death?

A The intravenous injection of Haldol is problematic. But in looking at the effect of lorazepam, the causality, in my opinion, is more compelling in the case of lorazepam. Even though the intravenous injection of Haldol -- notwithstanding the fact I won't be expressing an expert opinion on emergency medicine treatment, in terms of toxicology, the intravenous injection of Haldol is problematic.

But, nonetheless, I specifically cited lorazepam, and that's because lorazepam is specifically associated with respiratory depression.

Q I'm focusing on Haldol right now. With regard to Haldol, you're not going to express the opinion that Haldol contributed to Mr. Goode's death, are you?

A I will say that the -- while the intravenous injection of Haldol is problematic and may well have contributed, it is much less compelling than in the instance of lorazepam, which is much more straightforward.

So I -- I differentiate the potential causality, and I assess Haldol to be a much lesser probability than lorazepam, which I find to be much more compelling because of its published association with respiratory depression.

Q With regard to Haldol, would it be your opinion that it may have contributed, but you can't be certain whether it did?

A Yes.
Q Okay. And the basis for your opinion relative to Ativan is that it is a respiratory depressant?
A Yes.
Q Is there any other basis that you have for your opinion that Ativan contributed to Mr. Goode's death?
A In addition to everything we've discussed? No.
Q What dose of Ativan was he given?
A Two milligrams intravenous.
Q Just one dose, right?
A That is what I read, and I read that on -- on Page 14 of BMH-D Medications - Clinical Orders, I see "LORazepam (ATIVAN) Injection 2 mg..." And I see Last "Administration" date 7/18/2015, July 18, 2015, at 28 -- 2108, 2-1-0-8 hours.
Q Were there levels of Ativan detected in the toxicology studies done postmortem?
A In looking at the Autopsy Report, NMS Lab, I see lorazepam, 8.7 nanograms per mil from the subclavian blood.
Q Is that a therapeutic level?
A Yes.
Q It is not a high level, is it?
A I agree.
Q Did you know that the Plaintiff has identified an expert who says that Mr. Goode should've received more Ativan?
A That I was not aware of aware of.

Q Have you reviewed any disclosures or reports from defense experts in this case?

A I have a package from Dr. -- the package is from the Plaintiff's attorney, but it includes an expert report by Dr. Vilke, the Curriculum Vitae, and two articles coauthored by Dr. Vilke. And I believe I've brought with me a textbook entitled "Sudden Deaths in Custody," for which Dr. Vilke is one of the coauthors.

Q Did you review Dr. Vilke's supplemental report, or only his original report?

A I will show you the report that I have. It's dated February 28th of 2017. And this, I believe, is the only report that I've received that is originating from Mr. Vilke.

Q Okay. And you have not then read the reports of any of the forensic pathology experts identified by any Defendant?

A Only Dr. Barnhart, to the best of my knowledge. I don't recall any others, other than Dr. Barnhart. And I understand that Dr. Barnhart is not per se a defense expert, but merely a fact witness.

Q She is the forensic pathologist who did the autopsy.

A Right. And that's why I designate her as a fact witness. And even though she may well be subpoenaed by the defense, I recognize the difference between a person who did the autopsy and a person subsequently contracted to review work. I obviously recognize that.

Q Did you know that she gave a deposition in this case because she was subpoenaed by the Plaintiff?

A I have received an electronic copy of that deposition.

Q How is her role different than yours in this case?

A She is the forensic pathologist of record who is commanded, choose your own verb, by the state to conduct an investigation into the cause and manner of death.

I, on the other hand, am not commanded by the state, but I am contracted by one of the representatives of the litigants. And so I perceive that there is a difference there, as -- and all forensic pathologists understand there's a difference between those two.

Q Is there any advantage that a forensic pathologist has who does an autopsy?

A The forensic pathologist who does the autopsy has the ability to take every sample that they believe may be relevant.

A subsequent pathologist is limited to the samples and more generally the inquiries made by the original pathologist. There's a difference.

Q Do you think that a forensic pathologist, who did an autopsy, is entitled to any deference as compared to a consultant who may have been retained after the litigation began?

A I'm not going to be arbitrarily argumentative. But

in the sense of deference, what is the meaning --

Q With regard to the cause of death or opinions expressed.

A I believe there may be an initial impression that a person hired by the state has a position that is perceived as more disinterested. And then subsequent inquiry and the position of that opinion with a published text, will reveal or fail to reveal any subsequent assignment of credibility to that opinion. But I agree they initially begin with a greater sense of disinterest.

Q Do you know Dr. Greg Davis?

A I don't recall meeting him, but the forensic pathologists are few and far between. I may well have met him. We're not drinking buddies. I don't recall any prolonged conversations with him. There aren't very many of us, so it'd be no surprise if we'd bumped into each other at a meeting. There's only about 400 of us total. We can all get into one room.

Q You have not reviewed his report in this case, have you?

A I have not.

Q Do you know Dr. Gerald Gowitt?

A I do not, that I know of.

Q You've not reviewed his report in this case, have you?

A That is correct.
Q Other than Dr. Vilke's February 2017 report, is there any other report of any defense expert you have reviewed?
A I'm thinking. Not that I recall. I don't think I have.
Q Have you reviewed any postmortem photographs of Mr. Goode?
A No. Not that I recall. I have a disk with a pre-mortem video at a hospital and at a scene, but I believe those are pre-mortem.
Q That's referenced in your report, isn't it?
A It's a disk in this binder that --
Q Yes.
A -- I believe you looked at.
Q You're -- oh. Have you -- you reviewed Dr. Nichols' deposition?
A I do not believe so.
Q Based upon your review of these records, did you conclude that Mr. Goode had taken any illegal drugs before his death?
A Yes.
Q What?
A LSD.
Q Anything else?
A I understand that he had taken marijuana, which is

illegal in his jurisdiction but not in ours.

Q You described in your report behavior that Mr. Goode exhibited after taking LSD, right?

A Yes.

Q And what behavior do you understand LSD caused in this case?

A Colloquially, he had a bad trip. More specifically, he was running around; he was talking in a nonsensical fashion; he was uttering phrases that made no sense to a sober, rational individual.

Q Such as?

A I believe he said something to the effect of "I don't know how to explode." I perhaps recall that. That, of course, makes no sense to a sober, rational person. So he clearly was running around and acting in what we'd consider an irrational fashion.

Q Out of control?

A Yes.

Q Combative?

A That is my understanding, yes. Although I didn't see it in the videos, my understanding from the accounts is he was out of control and combative.

As I understand it, he walked up to a police car and in an uninvited fashion opened the door to the police car. Clearly, you know, socially and legally unacceptable behavior.

Q And you relate all of that behavior to his ingestion of LSD?

A Likely. Although marijuana is a hallucinogen, I believe it's likely related to his LSD.

Q Did marijuana use contribute to that behavior?

A It may have, but it is a less common response to marijuana and a more common -- much more common response to LSD.

In this jurisdiction, marijuana is quite common, and yet this behavior is not common. So I tell you that this response to marijuana is possible, but quite uncommon.

Q When you say this jurisdiction, you're referring to Colorado --

A State of Colorado which --

Q -- where we are today?

A -- is where we are today.

Q Okay. the pages of your report are not numbered, but as I count them, on the sixth page of your report -- if you could locate that page, please. It has a heading at the bottom. It says "The Baptist Medical Records." Are we looking at the same page?

A Yes.

Q In the incomplete paragraph that begins that page, the last sentence says, in part: "Likewise, the excited state precipitated by ingestion of LSD..."

Do you see that phrase? You refer to "the excited state precipitated by ingestion of LSD."

A Ah, at the top --

Q Yes, sir.

A -- yes.

Q Tell us what you mean by that phrase, "the excited state precipitated by ingestion of LSD"?

A As I understand the description of his behavior, any common person seeing him run around in circles would agree that he was quite excited.

No one would dispute that a person running around in circles, opening up a police car door uninvited, that type of behavior clearly -- and that you could use multiple different adjectives, and individuals would, but "excited" is an adjective that no one would dispute.

Q And it's the way that you chose to characterize it in your report, an "excited state precipitated by ingestion of LSD"?

A Yes.

Q Did you read that Mr. Goode was claustrophobic?

A I don't recall the specific sentence, but my general recollection is that he had -- he may well have expressed that opinion, you know, during the sequence of events.

Q I'm not suggesting to you that somebody actually used the word "claustrophobic." But did he have that sensation of

being claustrophobic?

A I don't recall the specific symptoms, but it's -- my recollection is that he went through a series of altered perceptions, and I believe that was one of them. And that again is common with LSD.

Q So, if -- if there's a description in the materials that he could not stand being in the confines of the automobile and got out, that would be something you've seen with LSD?

A I myself have not seen that many individuals, you know, who died while under the influence of LSD. I've never seen a person who died because of LSD.

But LSD came -- came and largely went before I started practicing forensic pathology. And I've never seen a person who died because of LSD, and I've seen individuals -- many individuals who exercise bad judgment because of other drugs. But LSD is not as popular right now as other hallucinogenic drugs.

Q Was Mr. Goode under the influence of LSD on the date of his death?

A Assuredly.

Q Do you known of circumstances where LSD has indirectly caused someone's death?

A Individuals exercise extremely poor judgment frequently because of altered perception while under the influence of LSD and partake in severely untoward behavior

which results in their death.

Q Was Mr. Goode's arrest in the hospital a sudden one?

A I've contemplated that question. And insomuch as this person's medical course was prolonged over a considerable period of time, and indeed there was an initial pulse oximetry reading of 90 percent, which is the cusp of the requirement for therapy with oxygen, I think it inappropriate to call this a sudden death because there was a clear indication of physiologic abnormalities for a prolonged period of time before his ultimate respiratory arrest.

Q What were those indications?

A Well, there's a pulse oximetry reading which is clearly abnormal. With a prolonged struggle in a hogtie position, there was assuredly a metabolic acidosis. Although I do not have a blood test from the hospital that verifies that, I'm completely comfortable diagnosing a metabolic acidosis based on that period of a version of isometric exercise in the hogtie position.

There is a description by the female civilian in the emergency room, which describes the decedent as -- I'll just summarize -- exhausted.

In light of those physiologic abnormalities and a prolonged time period until cessation of breathing, I don't think I would call this either sudden or unexpected, because of that prolonged time period.

When I think of sudden and unexpected, I think of a person carrying on a casual conversation and then, you know, they're grasping their throat or grasping their chest and keeling over in front of everybody in an unexpected fashion.

Q Do you have --

A This is -- this is not that case.

Q Do you have an understanding as to how long it was from the time from which Mr. Goode stopped fighting or struggling until he arrested?

A Some of the accounts indicate that the time period was quite short. And I refer to the account by the police officer who recounts that this person had a period of, you know, about ten minutes.

My perception is that that account disagrees or is not consistent with the account by the female civilian, who gives an account of a person, who I interpret as subdued, as they're being transported to the other room. So my perception is there's a discrepancy in opinions by different witnesses.

Q Did you take on the role as one who decides which witness to believe and which to reject, or is that somebody else's job?

A As a forensic pathologist, I train the younger physicians coming up that one must attend to what everyone says, but there are going to be inevitably discrepancies. So that, at some point, one is going to have to make an assessment

as to who is more likely accurate or less likely accurate. I will have to make an assessment at some point.

In this instance, to some extent, it's not critical that I sort that out. I could've figured out that, after a prolonged period of isometric exercises, the individual would be exhausted. And I would've -- I would've made that assessment independent of the civilian that has that eyewitness account.

And I have -- for purposes of my assessment of the contribution of lorazepam, I have, in addition to the eyewitness account of the police officer, attempted to verify that as -- as you've seen, using time documentation in the medical record.

And that was my discussion of the time frame of the onset of the action of lorazepam given in an intravenous injection. I both used -- as we've discussed earlier today, both the verbal description of the police officer as well as the timestamp declarations in the medical record.

So, yes, I -- I will assess their credibility, and I will use as many ancillary clues, pieces of documentation, as I can, to create the most reliable timeline that I'm able to do in making my opinion. Yes, I do assess their credibility.

Q Is there a difference between the assessment done and reported by the healthcare providers versus Mrs. Tharp, who I believe is the lay witness to whom you've made reference?

MR. EDWARDS: I'm sorry, could you read that back?

(Record read back by reporter.)

MR. EDWARDS: Yeah, object to the form.

A I believe there's a discrepancy. As I understand, the healthcare providers, as I best understand it, had indicated that there was screaming and that type of activity, clear to the time of the intravenous injection of lorazepam.

Because the description by the lay witness was a description of a person between hospital rooms, while she doesn't have a timestamp on that observation, I interpret that so as to mean before he reached his secondary room.

So I perceive a difference in their timing of his subdued behavior, but I agree that -- I don't recall that she put a timestamp or made a recollection of the specific -- I don't recall that she made a specific recollection of the time. But as I put the circumstances back together, I believe they are different, only because of the location of the patient when each observation was made.

Q (BY MR. PHILLIPS) Would it make any difference, in the conclusion you've reached, if the description by the medical providers is accurate?

A As to my cause or manner of death, it will make a difference.

Q You have not read Dr. Oliver's deposition, have you?

A I do not believe I have.

Q And do you know that there are some other hospital personnel who have been deposed, whose depositions you've not read?

A In this package I showed you, I believe there's an RN, Jeffrey Baker. I have read that deposition. I don't believe I've read any of the depositions of any of the other healthcare providers, that I recall.

Right now, I tell you, based on what I've seen, it's unlikely that there is anything that they would say that's going to alter my opinion. I would, of course, be happy to read them.

Q Is there any reason you wouldn't consider the deposition testimony of the eyewitnesses before reaching an opinion?

A I would, of course, be happy to read them. But I tell you that the opinion, particularly on the lorazepam, is based substantially on the only eyewitness, the police officer, and the medical record.

And it -- I believe it unlikely that any of the other healthcare providers are going to dispute the time record that's in the published medical record. It's possible they would dispute it.

And if they did, I'd have to listen to what they had to say. For instance, if they said, "Well, we never

administered lorazepam," obviously, I'd have to consider that and judge that with the medical record.

So, when you asked, "Should you consider it?" yeah, if they specifically dispute the medical record, then I'm gonna have to consider that.

Q Well, shouldn't you consider the testimony of the eyewitnesses to the patient's condition in the emergency room if you're going to be providing opinions about his condition in the emergency room?

A Of all of the opinions I've read, there appears to be widespread consensus that he was acting in an irrational and excited fashion.

Q While in the emergency room?

A Yes.

Q Okay.

A Both before and after arrival. So I do not doubt that he had this response to LSD, colloquially bad trip, more specifically combative, irrational, "I don't know how to explode." Clearly acting in that fashion. I don't dispute that.

I -- I don't understand -- I'm not aware that there is any dispute that he was hogtied. Plus, I got to see the videotape. So that the police accounts of when this event started at the concert and the medical record documentation of when it terminated with his cessation of breathing appears to

be beyond dispute, as near as I can tell.

If someone were to say, "Well, you know, it wasn't at a concert," or "We didn't give lorazepam," or "He wasn't combative," that would be important. But it doesn't sound like that's going to occur.

I believe, in my medical opinion, I have seen sufficient documentation, have seen the Autopsy Report, to reach this conclusion, or I would not have reached it.

Q You did consider among the Baptist medical records --

THE REPORTER: I'm sorry, you did consider?

Q (BY MR. PHILLIPS) You did consider among the Baptist medical records the note that Dr. Oliver made, right?

A I will tell you what I have from the medical records. I have on Page 8 a note signed by Dr. Oliver, drug abuse, acute psychosis, and cardiopulmonary arrest.

I have a history and physical examination by Dr. Oliver, which is Pages 6 and 7. I have a diagnosis of respiratory failure by Dr. Oliver and intubation time of 9:27 p.m.

Q Did you accept Dr. Oliver's description of the patient, at the time Dr. Oliver saw the patient, as being accurate?

A I will recount what it says. I note that he says: "I was unable to gather any meaningful history from the patient

because he continued to scream violently and incoherently during the encounter. He kept repeating 'I do not know how to explode.'"

So, yes, I understand what Dr. Oliver has said --

Q My -- my question --

A -- and I take that at face value. I do understand that, in assessing the timeline, that there is a -- an account by a civilian female in the ER, which does appear to have some discrepancies with any assertion that he was acting in the same fashion up until the moment he got the intravenous injection of Ativan and Haldol. I understand there's a discrepancy.

But in making my determination that he was in a hogtie restraint, that he had a pulse oximetry reading of 90, my assessment that he would've had a significant metabolic acidosis, that discrepancy doesn't play into my diagnosis. I understand that it exists, but it doesn't compel me to go one way or another away from those diagnoses.

Q I simply wanted to know, having refreshed yourself on what Dr. Oliver described in his notes as the patient's condition when he saw the patient, if you accept that factual description as true, or if you think it's an inaccurate description, or have no opinion on that topic?

A Do I accept it as true? It is certainly similar to the descriptions given by multiple individuals. So there is significant reason to believe that, for a period of time, it is

completely accurate.

As to how long the -- the activity was like that, I understand there's a discrepancy. But at one time or another, do I believe that Dr. Oliver actually saw and heard these things? I believe that's reasonable to believe.

I'm just saying I don't know how long he behaved in that fashion. And in assessing the hypoxia due to the hogtying and the respiratory depression by the lorazepam, I'm not sure that discrepancy is a compelling aspect of either disputing my medical opinion or accepting it.

Q Do you understand that Mrs. Tharp, the lay witness to whom you've made reference, saw the patient before Dr. Oliver saw the patient and did not see the patient at the time Dr. Oliver was evaluating the patient?

A I do not know the relationship between those two -- the time relationship between those two events. I do not know.

Q Is an oxygen saturation of 90 percent life-threatening?

A It is on the cusp of a measurement that would require oxygen therapy. In addition, that statement is obviously appropriate to make in any individual. I caution you that this particular individual had another significant physiologic challenge, and that is metabolic acidosis, so that this patient is different than other patients who do not have a significant metabolic acidosis.

And I would caution any medical caregiver that a pulse oximetry reading of 90 in and of itself carries certain cautionary admonishments, more so in a person who had another underlying physiologic problem, and that's metabolic acidosis.

Q In your practice, do you normally use and respond to oxygen saturation measurements?

A Since 2005, no. I do -- since -- other than seeing patients with trauma, all the patients have been dead patients.

Q Is it your opinion that, had Mr. Goode been restrained in a different manner, he would have been combative and struggled?

A The answer to that question is "Yes."

Q Why?

A Because he was combative and struggled prior to the time he was restrained, when he was running around, opening the door uninvited to the police car. It is reasonable to conclude that, if he was acting in an irrational fashion before he was restrained, he would continue after he was restrained, irregardless -- not the "irregardless," the word. It's not a word. But regardless of -- regardless of the type of restraint, I believe it reasonable to conclude that he would've continued his unreasonable behavior.

Q And irrespective of the manner of restraint, if he continued his struggle against the restraint, how would that affect him?

A Even if there was no restraint, every individual is going to tire as they run around, and everyone is going to understand that intuitively.

Forensic pathologists have identified the hogtying as a particular type of restraint which is problematic. There are other types of restraint which may be more or less problematic.

I'm certainly familiar with individuals who have been restrained chemically. In some instances, an individual would be given a version of curare and paralyzed and intubated. That individual would not experience the muscular activity, of course, of a person who's running around either restrained or not restrained. So there are different ways of restraining a person both physically and chemically.

So, when you say both of us agree that irrespect --

THE REPORTER: I'm sorry?

A Both of us agree that -- the word -- not irrespectively or whatever, is not a word, but the type of restraint is going to affect the degree of muscular activity.

A chemical restraint with paralysis by one of the curare medications, there would be no muscular activity because the person is paralyzed. With other types of restraint, there will be relative degrees of muscular usage.

If pressure is applied to the back, that doesn't change muscular usage; it changes respiratory effort. In some

sense, it changes muscular effort because, if there's pressure on the back, one still needs to move one's chest wall in order to breathe. If there's pressure on the stomach, one still needs to move one's diaphragm in order to inflate the lungs.

So pressure on the back will exacerbate the muscles used for respiratory effort, both diaphragm and intercostal muscles.

The type of restraint will also affect the amount of isometric activity of the muscles of the extremities. And that is why forensic pathologists have identified the hogtie restraint, both because of pressure on the abdomen, making it more difficult to move one's diaphragm, as well as the inevitable isometric struggle against the restraint, causing exhaustion and concomitantly metabolic acidosis.

Q (BY MR. PHILLIPS) Let me ask my question again because --

A Please.

Q -- with respect, I don't think you've answered it.

A Please.

Q If you'll focus on my questions and try to answer them, that would help us move along.

A Please.

Q If Mr. Goode had been restrained in some manner other than what you've been referring to as the hogtie position, you have said that you think it likely that he would've continued

to struggle against those restraints?

A I agree.

Q My question to you simply is: How would that struggle against a different type of restraint have affected Mr. Goode, in your opinion?

MR. EDWARDS: Object to the form, unless you specify the form of restraint that you're asking about.

A And, of course, because I -- there are different types of restraints, it's a bit of a guess or speculation.

Q (BY MR. PHILLIPS) Well, let me refine it for you. Suppose he is supine with his arms and legs tied in some fashion to the gurney, and he struggles against those restraints. How would that likely impact him?

A The supine position has been identified in the forensic literature as the position in which it is easier to breathe. And depending on the nature of the restraint of his extremities, he may or may not respond in a more docile fashion.

Q Would his combating or struggling against that type of restraint drive his heart rate up probably?

A If he is struggling with or without restraints, his heart rate will be accelerated. So that even when he was outside restraints, running around, his heart rate would be accelerated because he was running around.

Q Would you expect his running around, as you've

described also, to increase his blood pressure?

A It would definitely increase his cardiac output. It would probably increase his pressure and pulse.

Q If he were restrained supine with his arms and legs attached to the side of the hospital gurney, would he still have the effects that you've described as being similar to isometric weightlifting?

A It is possible that he would, or it is possible that he wouldn't, depending on his perception of his -- and we both agree he has an altered perception and a sense of claustrophobia and other types of altered perception. But his response to his environment is going to affect his level of the equivalent of isometric exercise. I agree, it will change.

MR. PHILLIPS: This is a good time for us to take a short break. Why don't we do that, and we'll resume shortly. Fellas on the phone, we're gonna take a short break, and we'll be back in a few minutes.

(Recess taken at 10:02 a.m. and back in session at 10:12 a.m.)

Q (BY MR. PHILLIPS) Was Mr. Goode at risk for sudden death irrespective of the manner in which he was restrained?

MR. EDWARDS: Object to form.

A There are no autopsy findings to suggest he was predisposed to sudden death from any type of natural disease. There is a history of asthma. Although, as I've stated, I saw

no findings in the microscopic examination. And neither marijuana nor LSD are associated with sudden, unexpected death, you know, due to the -- particularly the marijuana at this level. But marijuana and LSD are not associated with toxicological death.

So I don't see anything in either his history or Autopsy Report or toxicology which would indicate that he was at any greater risk of sudden, unexpected death than the background population.

Q (BY MR. PHILLIPS) Well, given the fact that he had taken LSD and, as you've said colloquially, was having a bad trip, if he were restrained in some other fashion, but combative and struggling against those restraints, would he be at risk for sudden death?

MR. EDWARDS: Object to the form.

A And, again, you know, to be fair, I don't know to what type of restraint you are referring. There are perhaps types of restraints which would have also compromised his respiratory effort and exacerbated his perceptions, albeit altered, that caused him to struggle.

There are other types of restraints which would not have been as exacerbatory (sic) or would not have tended to exacerbate his underlying physiology. So the answer could go both ways, depending on the type of restraint.

Q (BY MR. PHILLIPS) What is beta phenethylamine?

A I don't recall specifically -- I've got Goodman & Gilman. We can look it up.
Q Do you know what that is?
A No.
Q Did you see the toxicology studies that Dr. Wecht did?
A I have them here. I see beta phenethylamine.
Q That was found present on the toxicology studies that Dr. Wecht did?
A Yes.
Q Do you know the significance of that --
A I do not.
Q -- being in Mr. Goode's body?
A I do not.
Q You've made reference earlier to there being situations where pressure is applied to the back of folks when they're restrained. Remembering making that comment?
A I do.
Q In the emergency room, was there any pressure or weight being applied to his back?
A I did not see any specific description of that, no.
Q Do you have an understanding as to how restricted he was in the restraint that was being used on him?
A I have an understanding.
Q Do you have any understanding as to whether he could

move his legs back and forth?

A My understanding is that, within the construct of cuffs around his or restraints around his legs, and secured to the restraints around his wrists, it still did allow for movement, yes. That's my understanding.

Q And would that be a good thing for the patient?

A The more they can move, the better for the patient.

Q I mean, it would be possible to restrain somebody so that they could not move their legs at all; is that --

A I agree.

Q He was not restrained in that manner?

A I agree -- to the best of my knowledge, I agree.

Q There were no straps across him in the emergency department, were there?

A In the emergency department, I don't recall that description. I do recall a description of five straps that may have been present at an earlier time period.

Q But not in the emergency room?

A Not that I recollect.

Q So would that mean that he was less restrained in the emergency room than he had been previously?

A That is possible.

Q If there had been straps over him, if there had been weight on his back, and there was neither straps on him nor weight on his back in the emergency room, he would be less

restrained in the emergency room than he had been previously, correct?

A To an extent, I agree.

Q Is acidosis normally determined through laboratory testing?

A Yes.

Q What kind of testing?

A You can do a blood test to determine the pH, meaning acidic or basic nature of the blood.

Q Arterial blood gasses?

A Yes.

Q We don't have that data for Mr. Goode, do we?

A I agree.

Q So we don't have a laboratory basis or a test that would lead or support the conclusion of a diagnosis of acidosis in this patient?

A I agree.

MR. EDWARDS: Doctor, let me see that, please.

THE WITNESS: (Handing notebook.)

MR. EDWARDS: Thank you.

Q (BY MR. PHILLIPS) If a patient is yelling and screaming, what does that indicate about his ability to breathe and move air through his lungs

A That he is able to pass air over his vocal cords, yes.

Q With -- with every occasion that the patient wanted to yell or scream, there would have to be an inspiration of breath to be able to yell or scream, right?

A Yes.

Q Is bicarbonate used after cardiac arrest to treat metabolic acidosis?

A Yes.

Q And to treat the metabolic acidosis that's associated with cardiac arrest?

A In a cardiopulmonary arrest, a substantial part of the ensuing acidosis will be related to the lack of respiration. That portion I would term a respiratory acidosis, because the person is no longer blowing off CO2.

So this person, in my medical opinion, had an underlying metabolic acidosis because of muscular activity. And then when this individual stopped breathing, that was exacerbated by the onset of what is now respiratory acidosis from cessation of blowing off CO2.

Q In your practice currently, are you normally involved in diagnosing acidosis in patients?

A Well, in live ones, no. But in dead patients, I do review medical charts on a regular basis to assist me in determining why they're dead.

And I'll go further. Individuals may die, for instance, of alcoholic ketoacidosis. That is a diagnosis I

make. And while I cannot measure acidosis in a postmortem individual and reliably predict their pre-mortem status based on pH, because they now have an overlying respiratory acidosis, I can measure ketones in the vitreous humor.

And I use those ketones along with vitreous urea nitrogen and creatinine to determine whether individuals may have a -- either an alcoholic ketoacidosis or diabetic ketoacidosis, and I do make those diagnoses as a cause of death. But I make those based on an inference of their acidotic state in a postmortem individual, based on their renal function and ketones in the vitreous humor.

So it is something I have to deal with, because I have to make that diagnosis. I just do it a different way because in dead people you can't use an arterial blood gas to reliably determine pre-mortem acidotic state. In a living person, you can't take their vitreous humor.

Q We know from your report that you've set forth your cause-of-death opinion in this case, right?

A Yes.

Q And what role do you think positional asphyxia had in Mr. Goode's death?

A I've referenced the textbooks. And when you go to the textbooks, you're going to find why my opinion exists. I believe that the restraint significantly contributed to respiratory compromise, and I cite the pulse oximetry reading

as some laboratory evidence of that.

And it is my, you know, training and experience in medicine where I point to the metabolic acidosis caused by straining against the restraint. And I believe I've cited the forensic literature which indicates that it is reasonable to conclude in this particular type of restraint that the struggle against those restraints contributed significantly, sufficiently, to assign a degree of causality to the death. And that comes right out of the literature, and I've cited that.

Q Sometimes I ask bad questions, so I apologize if I've done that. Can a patient have primary causes of death and secondary causes of death?

A Yes. And by secondary, I mean contributory causes. We use the word contributory. But I -- I knew what you meant. You meant secondary or contributory. And I agree.

Q Yeah. And what category is positional asphyxia, in your opinion?

A Obviously, in this case I've cited two important factors: Lorazepam, respiratory depression; restraint causing hypoxia and metabolic acidosis.

And I've agreed with you that different forensic pathologists may reasonably assess different causality -- different degrees of causality.

In this instance, I believe I'm attending quite

closely to the forensic texts when I say that the hogtie restraint contributed to a degree, which I won't put a metric on, a number, but sufficient to list it as a cause of death. And I base that on the published literature.

But I -- in this case, I have also admonished the reader of my report that, while the forensic literature clearly identifies this hogtie as a sufficient cause of death, and it is certainly within the forensic pathology standard of practice to use that as a cause of death, and this person did indeed have that restraint -- in this particular case, I've admonished the reader of my report that, because of the -- what I believe is a very strong temporal relationship -- and we've talked about causality and temporal relationships. But because of the temporal relationship, I have admonished the reader that the administration of a respiratory depressant in the setting of what I already believe to be a methodology sufficient to cause death, lorazepam has to be considered as contributing in a sufficiently significant fashion that I believe it must be listed.

So I've listed those two causes, and I -- I believe both of those fall well within the published forensic literature.

As to a metric or a number, I can't put a metric or a number on them. But I believe it is reasonable to list both of them based on the published forensic literature.

Q Did Mr. Goode's fighting against the restraints contribute to his death?

A I believe the answer to that question is "Yes."

Q How so?

A It is his fight against those restraints, the use of those muscles, which exacerbated metabolic acidosis. So I am convinced that the physical struggle against those restraints contributed to his -- what we call physiologic challenge, or physiologic insult. I'm not saying, "You dirty rat." By physiologic insult, I'm saying the perturbation in his physiology, and that is specifically metabolic acidosis.

Q Did the LSD contribute at all to his death, in your opinion?

A While LSD, to the best of my knowledge, in the history of medicine, has never been known to cause death, it certainly caused his combative state.

And I have told you that his combative state and his combat against the restraints is the etiology or cause of his metabolic acidosis. So I believe there is a relationship, yes. Of course, there is a relationship.

But I also caution you, to the best of my knowledge, LSD in and of itself, either through toxicological means, has never caused a death that I'm aware of. And I brought three textbooks which specifically state that so that we can review "Why would I issue that statement?"

Q But the way it contributes, in your opinion, is not because it was at a toxic level, but because it led to the struggle and combativeness against the restraints?

A And anyone -- even the most casual, non-medical individual would understand that. His struggle was a consequence of his ingestion of LSD.

Q You have made a point in your report as to how Mr. Goode's death should be classified. Do you remember commenting on that near the end of your report?

A Yes, I do.

Q Is that at all important for the conclusion you reach as to his cause of death?

A Cause and manner are different. In this -- certainly in this jurisdiction, the coroner has, you know, those two obligations. And that is -- those two obligations apply to, you know, every state and, you know, the other country in which I practiced forensic pathology. Even down in New Zealand that's required. Cause and manner.

Manner, we only have five choices, as you likely know: Homicide, suicide, accident, natural, and undetermined. So those are separate issues.

So, when you say -- if you ask, you know, "How are they linked?" they're separate issues. Those are separate issues. Obviously, the manner depends on the cause, but the cause does not depend on the manner.

Q What is the basis for your opinion that his death -- his manner of death should be classified as a homicide?

A That comes right out of the published literature that I've -- that I've cited here, and I've brought some of it with me so we could look over that together.

And -- and the basis of the reasoning is this: Homicide is defined as death at the hands of another. And then by another, they mean another human being.

In this instance, there was indisputably a violent struggle. And the hogtying -- I don't believe there's any dispute that those handcuffs were affixed by another human being.

So that the literature indicates that, when there is a violent struggle between human beings, and the forensic pathologist believes that that violent struggle contributed to death, then the appropriate determination of manner is homicide because of the definition of death at the hands of another.

Q That's not to suggest that you're opining that another intended to cause Mr. Goode's death, is it?

A I agree entirely with your statement. In making the medical determination of homicide, it is as I have described, death at the hands of another.

My medical determination is different than a legal determination. And every time this issue comes up in court, if you were to review my transcripts, you would see that I assure

the court that I am not invading the province of the court, and that is determining the legal nature of the event. I'm only determining the medical nature of the event, but I will not invade the court's ability to determine the legal nature of the event. So my use of the term "homicide" is a medical term.

Q You understand that the case we're here to discuss is a civil and not a criminal case, right?

A I agree. That is my understanding. This has -- there are no state attorneys or prosecuting attorneys involved in this case whatsoever, neither on the telephone or in any aspect of this case.

Q And if a forensic pathologist reached a conclusion as to manner of death, it was homicide, it would then be up to the prosecutor in that jurisdiction to consider that information along with everything else and make a determination about whether to pursue that under the criminal laws?

A Right. And that's what I mean by province of the court and the associated officers of the court, who are the prosecuting attorneys. And I will not invade that province.

Q Do you think that even your opinion pertaining to Ativan should be classified as a homicide?

A The answer to that is -- I will just say complex. I have contemplated that issue at length. It -- if we have that discussion, it would be the case that I would begin to express my understanding or opinion about standard of care. Those are

my caveats. I will proceed to discuss it further if you wish.

Q Well, confining it to just manner of death, is it your opinion that the administration of Ativan should be classified -- in his death, if it's related to that, should be classified as a homicide?

A If Ativan was the only issue, I probably would not have classified it as a homicide. But I tell you: It is severely problematic to administer a respiratory depressant to an individual who has these -- this medical condition. Assuredly metabolic acidosis, notwithstanding the absence of a laboratory test; assuredly exhaustion, despite the difference in descriptions of the individual.

It is severely problematic to administer a respiratory depressant and then leave the patient in the custody of an individual who, to the best of my knowledge, has no formal medical or nursing training in anything, particularly cardiac or pulmonary monitoring or physiology; has no credentials at the facility; no continuing medical or nursing education. That is severely problematic.

And because, I guess, I've spent so much time in this, I understand that the question of acting recklessly, and so as to endanger, might arise. However, notwithstanding my -- notwithstanding my understanding of the situation, relinquishing this patient after administering a respiratory depressant to a person with no training and no credentials, to

the best of my knowledge, that is problematic.

The question might arise, but I would not have initiated a legal problem by causing merely the administration of lorazepam, Ativan. Under those problematic circumstances, I probably would not have called that a homicide, but I do understand that it is severely problematic.

Q That gets into the standard-of-care issues that we talked about earlier, right?

A And that's why I --

Q Okay.

A -- I indicated that. I've already agreed I'm not gonna be admitted as an expert in standard of care, but that I'm not ignorant of that standard of care nonetheless.

Q You're aware, from reading Dr. Barnhart's deposition, that she did not link Mr. Goode's death to positional asphyxia or the manner of restraint, right?

A While I don't remember her specific words, it is my impression that she has specifically disputed that any aspect of the hogtie caused death.

Q Did you read and consider the entirety of Dr. Barnhart's deposition?

A I've read it multiple times --

Q Okay.

A -- and I have considered it at length. I -- I understand that her opinion and my opinion at this time are

diametrically opposed. I don't believe I've ever met her. But I understand that our opinions are diametrically opposed. And I understand she made no mention whatsoever of lorazepam.

Nonetheless, I continue to assert that for what I believe to be an excellent reason.

Q In your report, if you could locate it for me, there is, on what I think is the next to the last page, a page that begins with the heading "Opinions."

A Got it.

Q Do you see that?

A Yeah.

Q On this page, you cite some literature or other sources, don't you?

A Yes.

Q Do you have all of these materials with you today that you've cited on the next to the last page of your report?

A I didn't bring them all, but -- because some of them are available on the Internet; they can easily be reached.

Others of them, actually -- the texts I actually brought hard copies. But the references on the Internet, I did not bring hard copies of those, but they're easily available to everybody.

Q Okay. I have tried to retrieve what you cited, and I don't have a clean copy to mark, but I'm happy to supply those after today, if we need to.

A Okay.

Q Is the first citation, on the next to the last page of your report, to an article titled "Sudden death during restraint: do some positions affect lung function?"

A I recall this specific title, but I'll take a peek at what you've got.

Q I'll just tell you that's the first citation in your report.

MR. GASS: I'm sorry, what was the page, Marty?

MR. PHILLIPS: It's the next to the last page of the report.

MR. GASS: Okay, I'm there. Thanks.

THE WITNESS: I'm just gonna bring it up on my smartphone.

MR. PHILLIPS: All right. Would you pass my copy back, please?

THE WITNESS: I'm gonna compare it when I punch it --

MR. PHILLILPS: Oh, okay.

THE WITNESS: -- up on the smartphone to what you've got.

MR. PHILLIPS: Sure.

THE WITNESS: (Looking.)

MR. EDWARDS: Off the record.

(Discussion off record re Internet.)

MR. PHILLIPS: Okay. Well, let's go back on the record.

Q (BY MR. PHILLIPS) Are you able to review that on the Internet, the article here?

MR. GASS: What's the title of it?

MR. PHILLIPS: "Sudden death during restraint: do some positions affect lung function?"

MR. EDWARDS: Is that PubMed.

THE WITNESS: PubMed.

MR. EDWARDS: It may only give you the --

THE WITNESS: This right now is just giving me the abstract.

MR. PHILLIPS: The cite is 138 Med.Sci. Law, Vol. 48, No. 2. Does that help?

THE WITNESS: I do have the abstract, but it's just not giving me the entire article here.

MR. PHILLIPS: Okay. Well, let's go back on the record. I think we can proceed.

Q (BY MR. PHILLIPS) Doctor, before we went off the record, we were looking at the next to the last page of your report, and the first citation on the page.

And I think that you have been able to confirm that the first citation is to an article entitled "Sudden death during restraint: do some positions affect lung function?"

And that is published at 138 Med.Sci. Law (2008) Vol 48, No. 2.

A Yes.

Q Is that right?

A That is correct.

Q Are the authors of this study medical doctors?

A This -- what I'm looking at is the abstract, and the one article does not have the "MD" suffix after his name or her name.

Q So the two listed do not appear MDs --

A Correct.

Q -- appear to be MDs, right?

A I agree.

Q And this is from the United Kingdom; is that right? A study done in the United Kingdom?

A May I see your copy?

Q Coventry University?

A That's not on the abstract that I'm looking at, but it may well be on the full copy that you have.

Q Okay. I will supply, after today, a clean copy of this article. We'll mark it as Exhibit 2, so we'll have it in the record since you've identified it for us.

A Yes.

MR. GASS: Actually, Doctor, if you'll just hit the author information plus button.

A Coventry University, Priority Street, Coventry, UK.

Q (BY MR. PHILLIPS) So it's a study from the UK?
A Yes. Or an article from the UK.
Q Did this article measure blood pressure?
A I don't recall. And on my summary here, it doesn't indicate.
Q Did it measure oxygen saturation level?
A On my copy, it doesn't -- on my abstract copy, that's not indicated one way or another.
Q Did it measure heart rate?
A On my abstract copy, that's not indicated one way or another. And I don't recall from memory.
Q Did it measure the patient's vital signs over time?
A Similarly, I don't recall from memory, and it's not included on this abstract copy.
Q What was measured?
A Well, since I don't have the entire article, and I don't recall it from memory, I'm unable to answer that question at this time.
Q Well, if it is forced vital capacity, what is that, if that's what's measured in the article?
A That is the capacity -- the volume that an individual can expel it from their lungs.
Q That's measuring one puff of exhale?
A Yes.
Q And the reduction in function of forced vital

capacity, FVC, is listed at a mean of 23.8 percent?

A Yes.

Q Would that remaining unimpaired function still be within the normal range?

A A 23-percent reduction would not in and of itself be fatal.

Q My question was: Could one have a reduction of approximately 23 percent and yet the function still be -- would be within the normal range of function?

A And again I don't recall that from memory, and I don't have the entire article in front of me.

Q Can a patient have some reduction in lung function and still have lung function within the normal limits?

A Yes.

Q Can patients have some reduction in lung function and it not be disabling or fatal to them?

A Yes.

Q Is there a difference between assessing whether there is a statistical reduction in lung function and measuring whether it has any clinical significance for a patient?

A Yes.

Q Do you recall what this article said about the clinical significance?

A No, but I would be happy to review it.

Q I'm gonna cite the copy that I have, which will

become Exhibit 2. This is on Page 140. And I'll read you the statement, and you're welcome to look at it if you need to.

It says: "We report statistically significant reductions in measures of lung function for two restraint positions: Position 4 and position 5. However, it remains open to debate whether these constitute clinically significant and potentially fatal restrictions."

A I would agree with that statement. I'm not reading it with you, but I agree with that statement conceptually, yes.

Q So this article does not reach the conclusion that the particular restraint results in a clinically significant change in lung function or a potentially fatal change in lung function, right?

A Not necessarily. That is correct.

Q The second source you cite on the next to the last page of your opinion gives us a title. "Acute Excited States And Sudden Death, Death After Restraint Can Be Avoided."

Do you see that one?

A I do.

Q Did you bring that source with you?

A I did not. It's available on the Internet, and I'm punching it up now.

Q Thank you.

A I have that -- part of it in front of me.

Q Is that a Letter to the editor?

A Yes.
Q Published in the British Medical Journal?
A Yes.
Q Volume 316?
A Yes.
Q April 1998?
A Yes.
Q This is not a research study, is it?
A Correct.
Q This is not a peer-reviewed article?
A I agree.
Q This is a person's opinion from the UK, who chose to write a letter to the editor, right?
A I agree.
Q It also does not reach the conclusion that the method of restraint results in a clinically significant change in a person's lung function, does it?
A It makes the statement: "Any person who is restrained prone has trouble breathing...," but it does not specify metrics of change in pulmonary function. I agree.
Q Okay. We'll mark a copy of this article as Exhibit 3, and I'll supply that later as well. I said article. It's actually a Letter to the editor as we agreed, right?
A We agree.
Q The next source you cite on the next to the last page

of your report is something entitled "Reducing the Risk Associated With Use Of Restraints." Is that right?

A Correct.

Q That is in the next-to-last paragraph on the page titled "Opinions"?

A I agree.

Q Can you retrieve that document, please?

A Yes.

Q Do you have it?

A I do.

Q Is it from a website --

A Yes.

Q -- called "corrections.com"?

A Yes.

Q What is that?

A It is obviously an opinion of an individual. This is not a peer-reviewed journal article.

Q Is this person, who is espousing this opinion, a medical doctor?

A No.

Q What is this person's training?

A I'm not aware of this person's training.

Q The person is Meghan Fay, listed as assistant editor?

A Yes.

Q And the publication date is July 27th of 2000?

A Correct.

Q Do you regularly read this source?

A No.

Q Is it reflective of any study that has been done to determine -- to determine the effects of particular kinds of restraint on lung function?

A While it is not in and of itself a study, and is not a peer-reviewed article, as I've already stated to you, in the published peer-reviewed forensic literature, there is -- it is our training that this type of restraint is problematic. In that sense, there are multiple individuals who reflect that literature.

This in and of itself is not a peer-reviewed journal article. If you ask, "Does it reflect opinions?" the answer is, "Yeah, of course, it does." But is it in and of itself a peer-reviewed controlled medical study? No, it is not. Does it reflect opinions published in the peer-reviewed literature, as I've already stated? Yes, it does.

Q This is not a source that forensic pathologists normally read, is it?

A That is correct. It was my -- my intention to demonstrate to you that, in addition to the peer-reviewed published forensic literature, there is -- there are other publications that reflect that literature that are commonly available to the individual who may not be reading forensic

texts.

Q We'll mark a copy of this website statement as Exhibit 4.

The other literature that you cite on the next to the last page of your report is cited with regard to how the manner of death should be classified, right?

A Correct.

Q Did you cite any other literature about whether the hogtie position as you've called it, or the prone maximal restraint position as others refer to it, leads to positional asphyxia?

A In the -- in the sense that these are discussions of restraint asphyxia -- I mean, that is the topic of these discussions. And the reason they have opined that this is death at the hands of another is because they believe that this is death at the hands of another. And that --

Q You cited, in the section about the manner of death, Dr. DiMaio's book, right?

A "Forensic Pathology," Second Edition (indicating).

Q You cited Dr. DiMaio?

A I did.

Q Are you familiar with his "Handbook of Forensic Pathology," Second Edition?

A His "Handbook of Forensic Pathology." I have his "Forensic Pathology," and I have his "Excited Delirium

Syndrome." I don't know that I have that text, no.

Q Okay. Here's the cover page of it. Does that look familiar to you?

A I do not have that.

Q Is Dr. DiMaio's publication a reliable authority in the field of forensic pathology?

A I'm not gonna recognize any of these texts as authoritative because they don't agree on all topics. I will recognize it as a learned treatise.

Q Is that true with the ones we've marked as exhibits as well?

A Those other exhibits fall below the level of -- certainly the last one fell below the level of learned treatise. And the Letter to the editor is just that. It's a Letter to the editor. I do not recognize that as a learned treatise. That is what it is; it's a Letter to the editor.

Q So Exhibits 3 and 4 don't qualify as learned treatises, in your opinion?

A No.

Q How about Exhibit 2?

A What's that?

Q That's the first one we looked at, "Sudden death during restraint..."

A That's a published article. It's peer-reviewed. That has to be taken in the context of all peer-reviewed

published articles, and it has been peer-reviewed and published.

It is obviously subject to correction in the future if science -- the understanding of science changes, which it always does.

So it's a published peer-reviewed journal article. That's exactly what it is. And there are obvious caveats associated with that. So I would not call that authoritative, because even the author would agree it's subject to change.

Q Have you necessarily reached a conclusion in this case that the manner in which Mr. Goode was restrained was clinically significant?

A I believe that it was. I believe that it caused a pulse oximetry reading of 90, and I've already opined that it contributed significantly to his death, so much so that I've also opined that its contribution to his death compels me to make the diagnosis of manner of death as homicide because I believe that this is death at the hands of another, and that the mechanism of that hands of another is not a gunshot; it's not a knife; it is restraint.

Q We looked at the passage together in Exhibit 2 that said it was still open to debate whether these findings were clinically significant and potentially fatal.

So you have reached the conclusion, with regard to Mr. Goode, that the article you cite, Exhibit 2, has not

reached with regard to this position, right?

A In this case, I have the advantage of --

Q Is that right?

A I reached the conclusion in this case that they didn't reach, because they know nothing about this case. This is a case with a pulse oximetry reading of 90 percent, and this is a case where a person is dead.

Q In the "Handbook of Forensic Pathology," Second Edition, that Dr. DiMaio has --

A I have not read that.

Q Okay. Let me make reference to some statements, and you tell me if you agree with them. This is on Page 169. It's under the heading "Hogtying -- Positional/Restraint Asphyxia."

Letter D on Page 169 says: "Research by Chan et al.[3] determined that the original experiments were in error. He found that while placing an individual facedown in the hogtie position following strenuous exercise, e.g., a struggle, did not" (sic) "produce restrictive pulmonary functioning as measured by a pulmonary function test, these results were not clinically relevant. There was no evidence of hypoxia."

Do you agree with that statement?

A Yes, I do.

Q Is that at odds with the opinion you're expressing in this case?

A Superficially, obviously, it's at odds. And perhaps

the answer, "I agree with that statement," is -- while indeed that is a statement, I agree that both -- I agree with DiMaio's interpretation of Chan's studies. So is that what Chan said? Yes, it is. Is that at odds with my diagnosis? Yes, of course, it is.

Q And so the conclusion that Chan reached, to which Dr. DiMaio made reference, is at odds with your conclusion in this case; is that right?

A If you believe Chan and -- this is my answer. You want it or not?

Q Okay. Page 169 --

A Oh, so you don't want the answer? So continue.

Q Oh, I thought you were finished. Go ahead.

A I asked you a question, "Do you want the answer?"

Q I thought you just gave it to me.

A No, I asked you if you wanted my answer.

Q What question are you answering?

A The one you asked.

Q Okay.

A If you believe Chan --

Q Okay.

A -- that there's no compromise in respiratory function, then the measured pulse oximetry in this case of 90 indicates, in no uncertain terms, that something was perpetrated on this decedent in excess of the 50 pounds that

Chan cites in his studies.

One must conclude, if you believe Chan, that some type of malevolent behavior occurred that caused a pulse oximetry reading of 90 percent, which Chan does not anticipate from applying even 50 pounds of pressure to a person in the prone hogtie position. Now, I don't know that that malevolent behavior occurred in excess of 50 pounds.

I also indicate to you that the time period that Chan used in his studies is different than the time period that this patient experienced before their death.

So that, while superficially you say, "You're at odds with Chan," Chan's studies do not recapitulate all of the circumstances of this case.

And if you believe Chan, that there should've been no change in pulse oximetry, then you must conclude that some malevolent behavior occurred in excess of putting 50 pounds of pressure on the back of this person in a hogtie position.

I'm not prepared to assert that that malevolent behavior occurred, but one must conclude it occurred if you believe that Chan's studies are accurate. That's my answer.

Q We may have covered this earlier, but I want to be sure I understand.

A Please.

Q From the materials you've read, you don't see any evidence that any pressure was applied to Mr. Goode's back in

the emergency department, do you?

A Right. And that is why I prefaced my statement with: If you believe Chan, then you must conclude that some type of malevolent behavior occurred in excess of 50 pounds of pressure on the back of a hogtied person.

But since there is no record of such malevolent behavior, I'm not going to assume that it occurred. And one of the reasons why I'm not compelled to make that conclusion was that Chan didn't take a person out to the time period that this patient experienced.

So I don't believe that anyone is compelled to believe that malevolent behavior must have occurred in light of the fact that Chan didn't take his experiments out that far.

So I'm not saying malevolent behavior occurred. But if you believe that, if Chan had taken his experiments out that far and gotten the same results, then I'm saying one must conclude that some type of malevolent behavior in excess of 50 pounds on the back must have occurred.

Q Is it your contention that there was some pressure put on Mr. Goode's back before he got to the emergency room?

A I have no record of that.

Q Okay.

A And in the videotapes, there's -- that I've seen, the brief videotapes, there's no evidence of that.

Q In what we've marked -- or what we're going to mark

as Exhibit 4 --

MR. PHILLIPS: Is that what we're up to now?

MR. GASS: 5, I think.

MR. PHILLIPS: 5, okay. That's the DiMaio book from which I've been asking you questions.

THE WITNESS: Please continue.

MR. PHILLIPS: Yes, sir.

Q (BY MR. PHILLIPS) On Page 169, Part E, DiMaio writes: "Subsequent tests in which weights were applied to the thorax also did not produce clinically relevant decreases in pulmonary functioning."

Do you agree with that statement?

A As I -- I also have restated that that is also my interpretation of Chan's results. So, of course, I agree with DiMaio's interpretation of Chan's experiments, because I also restated that. And I actually specified up to 50 pounds.

Q And then the last sentence on Part E says: "Thus, there is no proof that ordinary force placed on an individual by kneeling on them or lying across their body compromises respiration."

Do you agree with that statement?

A In -- as a summary of Chan's experiments, I agree that is the summary.

But I also caution you that empirically the forensic

pathology community has indicated that it is reasonable to diagnose restraint asphyxia in the setting of a hogtie.

As to whether pressure was applied or not, I do not know. In this case, empirically I tell you there was a pulse oximetry reading of 90 percent.

Q Is there some forensic text or journal that you have available to you, outside of what you've cited here, that we've already made reference to, that supports the idea that position -- that the prone maximal restraint position leads to clinically significant decrease in pulmonary function and ventilation?

A Well, they certainly assert that it leads to death. As to the mechanism of that death, you're asking: Do they specifically cite change in pulmonary function?

They discuss that possibility, but I -- I don't recall -- other than stating that, yes, it's associated with death, I don't know that they specified the specific mechanism by which the empiric observation that these individuals frequently die -- I don't know that they cite the specific with -- in a pedantic fashion, I don't know if they cite the specific mechanism. But, of course, they cite the empiric observation that these individuals frequently die.

Q Well, we've talked about the conclusions reached in the Chan study --

A Yes.

Q -- a little bit now. Are you aware of any statement in any of these forensic texts, that you brought with you, that would dispute Chan's conclusion?

A Well, Chan did his study in response to contradictory statements. I mean, that was the reason for doing the study.

So, while I don't remember the exact page, I mean there's a reason he did the study, and that was in response to specific statements to the effect that pulmonary function is compromised.

And certainly individuals have cited the hogtie position and the prone position as restricting pulmonary function, and that was the reason for these experiments.

But, as I've said, you know, to an extent these experiments apply; but to an extent he really didn't take them out to the time period that this person experienced.

Q Here's what I --

A And empirically this person does have hypoxia.

Q Here's what I'm trying to determine, Dr. Arnall.

A Please.

Q Okay. I want to know if there is any statement in these books, that you have on the table with you, that would be at odds with the statements we've read from Chan's study and from Dr. DiMaio's book about whether the prone maximal restraint position leads to clinically significant decrease in pulmonary function. And if so, I'd like you to open the book

and show me the statements.

A I don't recall any specific statement about pulmonary function. They clearly indicate that death is associated with this, but I don't recall that they specify pulmonary function as the mechanism.

Although, many of the texts speak to the issue that, you know, obesity is associated with individuals in a hogtie position, in particular associated with excited delirium. And they specify that, in individuals who are obese and have excited delirium in a hogtie position, it is that obesity pressing against the diaphragms which restricts pulmonary function.

And I can -- I can try to find that reference. I mean, I can go ahead and try to find that reference if you wish about obesity and excited delirium and hogtie and restriction of pulmonary function. (Looking.)

Reading Page 309 of "Forensic Pathology, Principles and Practice" by David Dolinak. The copyright is 2005. Under a chapter entitled "Hog-tying" (sic) -- I'm just gonna excerpt it. Obviously, you're welcome to read the context of the statement.

"Hog-tying" (sic). "During or shortly after the restraining process, the subject may rarely develop difficulty breathing or may be found unresponsive."

So there's a reference to breathing. I interpret

breathing as pulmonary function.

Q Would you agree with me that to say that a person died while in restraint is not necessarily to say that a person died because of the restraint?

A I agree. I agree with that statement.

Q Isn't Dr. Dolinak really telling us that some people have died while restrained?

A Yes.

Q Okay. I wanna mark that expert from the Dolinak text as Exhibit 6.

Is there any other statement from any other textbook that you think would support your opinion in this case?

A Let me read one more sentence --

Q Please.

A -- that perhaps would be helpful to our discussion.

Q Please.

A "Quite often these deaths are not solely asphyxial in that nature, but rather, there is an interplay between varying degrees of asphyxia with heart disease, sympathomimetic drug abuse, and the body's physiologic response to stress and exertion."

And he goes on, in the last, an admonition. "During patient transport by a" medical -- "emergency medical services, the supine or lateral body position is encouraged rather than the prone position to limit the possible deleterious effects

that mechanical/positional asphyxia may have on respiration."

I believe that directly addresses the issue you've raised. And there's even an admonition to medical personnel, "Don't do this."

Q Is there any statement to which you need to refer us in any of the other texts you've brought?

A I'll look. And, again, that's one excerpt. You know, I haven't gone back through the entire text. I found that in 30 seconds.

Q Had you looked at that text before today to see if it addressed the topic we're discussing today?

A Yes. And I -- there are multiple passages in the textbook which may touch upon issues relevant to this discussion, and that's why I brought it.

MR. GASS: Do you remember the page --

THE WITNESS: 309.

MR. GASS: -- that you were reading from?

THE WITNESS: 309.

MR. GASS: Thank you.

MR. PHILLIPS: That's not the one he read from.

THE WITNESS: This one here.

MR. GASS: Oh.

A Harrison's textbook merely states that no one has died of LSD. (Looking.) I'm looking at "Medicolegal Investigation of Death," Spitz and Fisher, 4th Edition, Page

832.

"An overweight individual, with a body mass index...in excess of 30...is especially susceptible for respiratory arrest when held this way due to protuberance of the anterior abdominal wall, which upon compression causes upward displacement of the abdominal organs and interference with the movements of the diaphragm."

And this is the third paragraph under the topic of -- and I'll read the -- the first sentence of Paragraph 3 above it. "The *hogtie restraint position*, also known as the *hobble or prone restraint*, is a type of restraint, often used by police, where the victim is face down on the ground, i.e., prone, handcuffed behind his back, ankles tied and the wrist and ankle bindings are then tied together."

Q Let's make a copy -- let's make a copy of those pages, to which you just made reference to in the Spitz and Fisher text, Exhibit 7.

Go ahead if you need to tell me something else.

A The last paragraph in the first column of Page 132 (sic) --

Q Is it Page 132, Doctor?

A I'm sorry, 832. 832. This cites studies by Neuman, which dispute an earlier paragraph, where he says *hogtie restraint position*, this method of restraint did not cause clinically relevant impairment of ventilation.

Q That statement would be at odds with your conclusion in this case, wouldn't it?

A It would be at odds with the paragraph -- three paragraphs before.

Q And at odds with the conclusion you reached in this case?

A It would be at odds with the empirically-derived pulse oximetry reading of 90 percent.

Q Would it be at odds with your conclusion?

A Yes.

Q Okay. Did Mr. Goode have a body mass index greater than 30?

A No.

Q So he would not fit the category of risks described in that text, would he?

A For respiratory compromise, no. However, body mass index is -- would not be an issue in discussing his metabolic acidosis due to straining against the restraints, what I referred to as a type of isometric exercise.

Q Is there anything else you need to tell me about from the Spitzer (sic) text, or are we completed?

A Well, I'll continue reading. I mean, again, I haven't memorized this text in its entirety. But I think you'll begin to understand that all of these texts refer to the hogtie restraint and specify that it has been associated with

deaths.

And they -- you and I have already agreed that there is a discussion into the -- in the literature, a discussion that is frequently contradictory, as to the specific mechanism by which this restraint is associated with so many deaths.

So I agree there is discussion in this textbook. I pointed out that, even in the same column, there's a discussion of the fact that, as you and I have discussed, there is debate between physicians as to just how so many people die in the hogtie-restraint position.

So I agree that there is discussion and disagreement as to the specific methodology, but every one of these textbooks addresses the issue of deaths in the hogtie position because it happens so often.

Q Is there any other textbook that has a statement you need to make reference to?

A Even the existence of the text by Chan and Vilke -- even its existence indicates that there is a reason to discuss the mechanism of death in so many hogtie-restraint-associated deaths.

Q You're talking about the one entitled "Sudden Deaths in Custody"?

A I am.

Q Is there any portion of that text that supports your opinion in this case?

A You know, I -- obviously, I -- I can read through it. I haven't memorized it sentence-by-sentence. I'm just saying: If the issue of hogtie-restraint deaths didn't exist, the textbook wouldn't exist.

I'm now looking at this DiMaio-DiMaio, "Excited Delirium..." text. As we have discussed, there are many citations where DiMaio disputes the respiratory contribution to death in a hogtie position. Obviously, he does. So there's no point in disputing that he doesn't, 'cause he does.

I would admonish you that -- for instance, on Page 126 of "Excited Delirium Syndrome," the author states: "The authors of this book have concluded that the *single most important factor* that determines if individuals experiencing excited delirium die is the violent physical exertion inherent in the *struggle*. This is true whether the excited delirium is due to drugs, mental illness, or a combination of both. Placing an individual in the *prone position* is not a critical element for most excited delirium syndrome deaths."

They go on to say: "After restraining the patient" -- this is the next paragraph. "After restraining the patient, continual assessment of the individual's level of consciousness and breathing should be maintained with 'face-to-face' observation by one member of the team. One should monitor the vital signs for signs of cardiac irregularities."

They actually recommend lorazepam in this text.

Q And is that Ativan?

A Yes. Then they go on to say: "The patient should be maintained in a sitting position for maximum breathing ability."

In responding to individuals who contest the respiratory contribution, why would you make this admonition to healthcare-givers if it wasn't relevant? You understand the inherent contradiction?

Why would you admonish them to have the person in a particular position for breathing if position of breathing was irrelevant? It's an obvious contradiction in logic.

Obviously, why would you require continuous monitoring by a member of the team? They're not talking about a football team. They're talking about a medical team. Why would they have that admonition if it wasn't relevant?

So you are correct. There are multiple references in this text that state breathing is not important; respiratory function is not compromised. And, yet, within the same text, there are specific admonitions that clearly indicate that breathing and continuing monitoring is critical.

So I make the concession you're right; that's what they say. And, yet, when you read it, it makes no sense they would -- they would have these conclusions.

And again, you know, I've taken three or four minutes to briefly read through a couple of paragraphs. But I think

you understand that a forensic pathologist, in reading all of this over the course of 30 years, is going to get a general impression: Wait a second, a lot of people die in a hogtie position. They've written books about it. Yeah, they're arguing about it and the specific mechanism, but it does occur.

In this particular case, while we can argue about the theoretical aspects of the hogtying position, you have an empiric observation of a pulse oximetry reading of 90 percent.

He says most of the time it's not relevant. But, in this case, empirically you have a -- not a partial pressure of oxygen, but a pulse oximetry that indicates that respiratory compromise is important.

Also, I specifically read to you the physician's diagnosis, and that was respiratory distress.

Q That was the diagnosis at the time of the code, though, right?

A That is correct.

Q Let's make as Exhibit 8 the excerpts from the "Excited Delirium..." text to which you just made reference.

A And I think I told you the page.

Q You did, I think, yes.

MR. GASS: Can you give it to me again and give me the book, so I can --

A 126. And again I'm not saying there aren't other references, but I think I've given you a sense or flavor of the

fact that these texts obviously do accept that people die in this position, and that indeed is the etiology for the discussion of a point. If those deaths didn't occur, we wouldn't be arguing about it.

Q (BY MR. PHILLIPS) Is excited delirium a diagnosis that you recognize as a forensic pathologist?

A I do recognize that diagnosis. I do, yes.

Q Is it commonly accepted among forensic pathologists?

A The issue of semantics. What's the definition of "common"? I will say everyone understands -- all forensic pathologists have both read about and heard discussions of excited delirium in our national meetings. So it's a common topic. You know, it's not an orphan topic. It's a common topic.

I think all of us who have worked in a big city have seen cases that cause us to place that diagnosis in the differential diagnosis of a death of a specific patient.

Q Have you ever concluded that a particular patient died from excited delirium?

A I've done about 4,000 autopsies. I don't recall that I made that diagnosis, but I assure you I have considered it on multiple occasions.

Q Has it been in your differential on multiple occasions?

A Right. When I say consider it, that means it's been

in my differential diagnosis. I knew it was something that I was required to contemplate.

Q Is Mr. Goode's death consistent with an excited delirium syndrome?

A "Consistent with" is the term that physicians use as the least statistically significant. So that when I use the word -- you know, the phrase "consistent with," you know, it has almost no causal -- no statistically significant meaning.

I have told you that he clearly was excited. A person would say, "Well, he was delirious." But is this an excited delirium death? I would say, "No." And I would cite for you the specific factors that I consider when I consider excited delirium.

I look to the issue: Is this person obese? And some of the articles have cited, "Well, these people average 220 pounds." Others use, you know, BMI. But individuals in excited delirium deaths are significantly obese. Individuals in excited delirium deaths frequently are hyper, H-Y-P-E-R, hyperthermic. They have a fever.

And one of the -- one of the articles says, "Well, they average 104 degrees Fahrenheit." So some of the -- some of the authors cite a specific temperature on average. Others just say, "Well, they're hyperthermic."

Other individuals cite cardiomegaly. Some will say, "Well, on average, in the cases we looked at, the -- the weight

was in the 400-gram range." Normal weight being 250 to 350 grams.

In this case, this person is not obese, does not have an elevated basil BMI. This person was not hyper, H-Y-P-E-R, thermic. Actually, he was a little bit below. He was 98.2 instead of 98.6. This person does not have underlying heart disease and certainly did not have cardiomegaly.

And last, but not least, you know, as we've talked about, fundamental to the discussion of excited delirium is, as you ostensibly pointed out, they're not hypoxic. In this case, we have documentation of hypoxia that is on the cusp of a requirement to treat with oxygen. It is of non-trivial hypoxia.

So that, for instance, you know, if this was a -- an LSD-related death due to excited delirium, as near as I can tell, it'd be the first case in recorded history. All of us involved in this case -- all of the physicians would be rushing to publish it.

Except to publish it, we'd have to go through a peer-review panel. And a peer-review panel would say: "Well, wait a second. Excited delirium, thank you very much. What about our obesity? What about our heart disease? What about, you know, no hypoxia? What about hyperthermia?"

It's unclear this would pass the scrutiny of a peer-reviewed panel. Because all of the other associated

criteria, which is what I look at when I look at a patient, the excited delirium being in the differential diagnosis, the peer review is gonna look for the same criteria that I look at.

Q Are there any symptoms or signs that Mr. Goode had that are consistent with excited delirium?

A He was excited, and he was delirious. So the answer to that question is "Yes," he clearly was excited; he clearly was delirious. The statement, "I don't know how to explode." Of course, that's a person who is talking in a completely irrational fashion. So that is a -- a -- both a -- a sign and a symptom.

Q What else?

A I am aware that Vilke has cited Karch as saying that LSD was associated with excited delirium, but I would be quick to show you Karch's textbook saying that no one's ever died due to LSD. So, as far as an excited delirium death, even Karch says not happened.

Q Are you aware of literature that has associated LSD with excited delirium?

A That's Vilke's reference to Karch.

Q Okay.

A He cites Karch's two studies in the '90s, but this textbook by Karch is written in 2002. And Karch -- I'm looking at Karch's "Pathology of Drug Abuse," 3rd Edition. I'm looking at Page 309, second paragraph, and the paragraph has actually a

numeric 4.5.4.1.4.

"No LSD related deaths were listed in the Medical Examiner component of the most recent DAWN report (Kissin," K-I-S-S-I-N, "and Garfield, 2000)."

Q We'll mark that excerpt as Exhibit 9.

A So even subsequent to his references as excited delirium might be associated with LSD, in a subsequent publication by the same author, he cites a reference that indicates that no LSD-related deaths have ever occurred. I think that's relevant to your question.

Q Is there any other forensic pathology texts that you plan to cite that you contend supports your opinion or is relevant to your opinion, other than those you've already talked to us about today?

A I have no plan on citing any others.

Q Okay. Do you recognize the "Sudden Deaths in Custody" text as being a learned treatise?

A I do.

MR. EDWARDS: Is that the one by Ross and Chan?

MR. PHILLIPS: Yes, he cited it earlier.

MR. EDWARDS: Okay. Just making sure we had --

A I do recognize it as a learned treatise.

Q (BY MR. PHILLIPS) And you're aware that there's a chapter in that text on positional and restraint asphyxia and a chapter on excited delirium?

A Yes, I do.

Q Are you aware of other studies in the field of forensic pathology that have addressed the issue of the prone maximal restraint position and whether it results in asphyxia, positional asphyxia?

A Of course, there are additional studies. I haven't memorized them all, but I think I've given you a flavor that numerous -- a flavor for the fact that numerous individuals have attempted to address this issue with controlled studies. And as we both agree, there is significant debate on the topic.

Q On the topic of whether the prone maximal restraint position results in positional asphyxia?

A Yes.

Q Are there reasonable pathologists who conclude that it does not?

A The answer is "Yes."

MR. EDWARDS: Object to the form of the question. What's a reasonable pathologist?

A There are individuals who are regularly employed as board-certified forensic pathologists. And we've even discussed the fact that Dr. Barnhart, who is regularly employed, is board-certified, has stated that positional asphyxia did not contribute to this death. I'm aware of that, yes.

Q (BY MR. PHILLIPS) Are you familiar with the

"American Journal of Forensic Medicine and Pathology"?

A Yes.

Q Who publishes that journal?

A Is that the orange journal published by NAME? I -- you know, obviously I subscribe to them. NAME -- NAME is one --

THE REPORTER: I'm sorry?

A NAME, the National Association of Medical Examiners, is associated with the publication of one. And I don't remember whether that specifically is NAME-published but -- or published by Elsevier. I don't recall.

Q (BY MR. PHILLIPS) Is the "American Journal of Forensic Medicine and Pathology" one that you read --

A I do.

Q -- and rely upon?

A I do.

Q You consider it a learned treatise?

A I do.

Q It's peer-reviewed?

A Yes, it is.

Q Are you familiar with the article from that journal entitled "Reexamination of custody restraint position and positional asphyxia," from 1997, by Chan, Vilke, and Neuman?

A I don't recall it specifically, but obviously I'm happy to look at a specific passage, if you wish.

Q If it states, "We conclude that the hogtie restraint position by itself does not cause respiratory compromise to the point of asphyxiation and that other factors are responsible for the sudden deaths of individuals placed in this position," do you agree with that statement?

A I believe my report specifically cites just such a phenomenon, and that is when I cite the metabolic acidosis associated with struggle against the restraints.

So I believe anyone who has listened to this discourse this morning would understand that even I have cited other physiologic issues which contribute to the problem.

Q Aside from the restraint?

A Aside from the ventilatory compromise.

Q Okay.

A But both the ventilatory compromise, which I believe is what that sentence refers to, as well as the metabolic acidosis, as I believe I have stated in my report, contribute to the problem.

Although, in this particular case, there is another third independent issue, and that is the administration of a respiratory depressant, lorazepam.

Q Do you recognize the "Journal of Forensic Science" as a learned treatise?

A I do.

Q Is it peer-reviewed?

A Yes.
Q Is it one that you normally read and rely upon?
A I do.
Q Are you familiar with the article published in January of 2007, in that journal, entitled "Ventilatory and Metabolic Demands During Aggressive Physical Restraint in Healthy Adults"?
A I don't recall it specifically. I likely have read it. I'd be happy to respond to it, a passage in it.
MR. EDWARDS: Who is the author, please?
MR. PHILLIPS: Is it Michaelwicz, the lead author? Does that sound right? M-I-C-H-A-E-L-W-I-C-Z. And, for the record, it was Exhibit 6 to Dr. Wecht's deposition.
MR. EDWARDS: Okay.
Q (BY MR. PHILLIPS) If that article concludes as follows, "Based upon these observations in healthy subjects, we conclude that the PMRP," the prone maximum restraint position, "and prone positioning with moderate weight force on the back do not in and of themselves restrict metabolic or ventilatory demands to any clinically important degree," do you agree with that statement?
A Read it again, please.
Q "Based upon these observations in healthy subjects, we conclude that PMRP and prone positioning with moderate weight force on the back do not in and of themselves restrict

metabolic or ventilatory demands to any clinically important degree."

MR. EDWARDS: Object to the form of the question. That gives no background as to what the experiments consisted of, how long they were conducted, or anything else.

Q (BY MR. PHILLIPS) Do you agree with that statement I read?

A And, again, before I'd agree with the statement, I probably should review exactly what they're speaking to, you know, the specifics of what they've summarized.

And I would reiterate my admonition that, if such a treatment (sic) was true -- if such a statement was true, then the pulse oximetry of -- a reading of 90 could only be interpreted as evidence of some other malevolent behavior, in excess of what they did during that experiment, had occurred to this decedent.

I'm not prepared to make that assertion, that there's other malevolent behavior. But I have to make that conclusion if I believed unequivocally that the hogtie position had no significant effect on either respiration or metabolic condition.

And I've already stated to you that I am comfortable that this patient did have metabolic acidosis based on his struggle against the restraint. And I say that in the context of all of the other discussions of individuals who are

undergoing isometric strength against those restraints.

So I understand what they have said, but you understand my concerns with that statement?

Q Okay. Are you able to tell me whether you agree or disagree with the statement I read?

A Well, I don't agree with it obviously in its entirety for the reasons I've just explained to you --

Q But this does --

A -- and the particulars as applies to this patient.

Q This does take into account metabolic demands according to the statement I read, right?

A I understand that. And I -- in no sense do I believe that this person struggled against those restraints for that period of time and experienced no metabolic acidosis. I don't believe that at all.

Q Are you familiar with the "Journal of Forensic and Legal Medicine"?

A Yes.

Q Is it a learned treatise?

A It is, but I don't read that all time. But I am aware of it.

Q It is literature within the field of forensic pathology, though?

A I agree.

Q Are you familiar with the article from 2013, "The

effect of prone maximal restraint position with and without weight force on cardiac output and other hemodynamic measures"?

A I believe I've read it, but I don't -- I haven't memorized it. So, if you wish to cite a specific passage, I'd be happy to discuss it.

Q Your contention is that the position impacted respiratory status, not cardiac status, right?

A It's obviously difficult to discuss respiratory function without discussing cardiac function. Having said that, I don't believe that the prone position compromises cardiac output.

Q Okay.

A So I -- I agree -- I agree with that part of it.

Q Okay.

A But I also caution you that, as pulmonary function is compromised, one must contemplate the response of the cardiac muscle. And, in particular, since I've already stated that this person had a metabolic acidosis, although I freely admit that there's no laboratory tests that confirms that, one has to contemplate that in terms of cardiac function.

But I don't believe the prone position in and of itself compresses the heart to the extent that it reduces cardiac output. I agree with that.

Q Are you familiar with the "Forensic Science International" publication?

A I am.
Q Is that a learned treatise, in your view?
A Yes.
Q Peer-reviewed?
A Yes.
Q One you regularly review?
A I've reviewed it many times.
Q You -- you have, I think, freely acknowledged that there are publications in the medical literature, specifically in your field of forensic pathology, that disagree with the conclusion you're reaching in this case, right?
A The reason I don't agree with your particular statement, and this is semantics, is that, as I've stated to you, many of these experiments do not extend to the time period that this person experienced.

So, while they are relevant, they do not specifically recapitulate this situation. So that I contest your statement that they dispute my opinion because they don't address the specifics of this case.

Also, I've specifically identified the fact that we have an empirically-derived metric, the pulse oximetry, which would indicate that none of these studies are relevant to this case because they -- all the studies indicate no compromise in pulmonary function.

And our discussion has been: Well, this -- what

happened to this gentleman didn't compromise pulmonary function. And I know I've reiterated, to the point of being irritating, that empirically it already did. It's too late to discuss the fact that it might not have, because it did. And we have an empirically-derived measurement to that effect.

So that, when I say it doesn't specifically contest my opinion, you know, either the experiments didn't go out to the time period that they did, or the experiments specifically state that there's no pulmonary compromise, and that specifically doesn't address this patient.

Q There are published studies, though, that reach conclusions that are different than the bases you're using to reach your opinions, though, right?

A I agree with that statement.

Q Okay. In your report -- and, again, the pages aren't numbered, but let me try and locate it. I think it's Page 5. There's a statement just above the heading that says the "Baptist Medical Records." I'll give you a minute to catch up with me.

A Got it.

Q In the last paragraph above that, it cites the National Institute of Health.

A NIH.

Q Do you have some publication from the National Institute of Health?

A I would have to go back to my notes to see where I derived that.

Q Well, the reason I asked the question, Doctor, is: When I get to the "Opinions" page, and I see the citations, I didn't see anything cited from the National Institute of Health. And we've gone through your articles, and I don't think we had anything from the National Institute of Health.

A And, again, I will have to go back. I didn't make a specific citation there. I'll have to go back and determine where I derived that specific statement.

Q You don't have that literature among the materials you brought with you today, do you?

A No.

Q And it's not cited in your report in the "Opinions" section, is it?

A I don't have a citation on that paragraph; that is correct.

Q If there is some publication from the National Institute of Health that you have reviewed and rely upon in this case, I'd ask you to provide that to Mr. Edwards, and we're gonna mark it as late filed Exhibit 10, okay?

A Fair enough.

Q And if there is not one, just let Mr. Edwards know that there's not one, and he can advise us accordingly.

A I will do so.

MR. PHILLIPS: Let's take another timeout. How about it?

(Recess taken at 11:57 a.m. and back in session at 12:10 p.m.)

MR. PHILLIPS: We'll go back on the record.

Q (BY MR. PHILLIPS) Did you review and consider the articles cited by Dr. Vilke in his report?

A Which article? I received two articles in my package. I received "Excited Delirium Syndrome," defined -- "Defining Based On A Review Of The Literature." And I also received "Excited delirium syndrome...Redefining an old diagnosis."

Q Did you read and consider both of those articles?

A I have read them at length, yes.

Q Okay. Do you agree with the articles?

A In what sense?

Q Well, is there anything that the article advances that you reject?

MR. EDWARDS: Well, I object to the form. That's not -- you know, that will require combing through it.

A (Reading.) As an example, you may call it disagreement, or just maybe I, you know, think that they worded it awkwardly. Here's a sentence, Page 8, Column 2, paragraph -- about Paragraph 4. "Autopsies, which did not include histochemical or neurochemical examination, did not

reveal a definite cause of death, although trauma and natural disease were excluded." And this is referring to obviously these excited delirium syndromes.

If you read Karch, which they obviously have referred to, you know that many of these cases are current in the context of cocaine, obviously.

Most cocaine users, if you look closely at the heart, as Karch has outlined in his text, are going to have either a degree of cardiomegaly and/or interstitial fibrosis of the myocardium. It's quite common with cocaine.

So that -- and, in particular, since we've already discussed the fact -- and obviously it's widely accepted that excited delirium deaths are associated with obesity and enlarged hearts. To say that there's no natural disease like -- I'm sorry, but that -- that disputes, you know, all of the other literature if you're meaning any natural disease.

If you're meaning, you know, sufficient natural disease caused death, well, I think that's probably what they meant to say. But the way they said it is awkward, and it's patently false. But I don't think they meant it to be a contradiction of all of those observations. It's just, you know, appallingly poorly worded.

When they say trauma has been excluded, in those individuals who had the maximal restraint, it doesn't take a pathologist to say, "Well, wait a second. Whether they call it

hogtying or maximal restraint, that's a traumatic process, and it's a traumatic process that's manifest with obvious physiologic changes, metabolic acidosis."

Anyone who's done isometric exercises for 90 minutes -- I played rugby for 80, and we actually had rest periods in rugby. You come out completely exhausted with leg cramps, obviously a manifestation of metabolic acidosis.

So, as we go through these articles, there are obviously sentences which, you know, if you're cynical, you'd say they're patently false. But I think it's fair to say, "Well, they weren't meant in an awkward fashion, and perhaps they didn't mean to say exactly what it appears as though they're saying."

So, you know, are there gonna be aspects in here they disagree with? Yeah, that everybody is gonna -- can reasonably disagree with. And even they would say, "Oh, that was poorly worded, and even we disagree with that -- a statement like that."

If you want me to go through every little sentence, I can do that. But you understand I'm not going to -- to agree with these in their entirety.

Q Okay. Let's mark the first excited delirium article as Exhibit 11.

MR. EDWARDS: Which one is that?

MR. PHILLIPS: Tell us the citation, Doctor.

MR. EDWARDS: Which journal?

THE WITNESS: "Journal of Forensic and Legal Medicine."

MR. EDWARDS: Got it.

THE WITNESS: 19 (2012), Pages 7-11.

MR. PHILLIPS: That will be Exhibit 11. And what is the second article.

THE WITNESS: Clinical Reviews. I think this is "The Journal of Emergency Medicine," Vol. 43, No. 5, Page 897.

MR. PHILLIPS: That will be Exhibit 12.

Q (BY MR. PHILLIPS) Other than Exhibit 11 and 12, did you consider any of the other articles cited by Dr. Vilke in his report?

A He talked about LSD being associated with excited delirium. I didn't look up the two articles that he referred to, but I went ahead and looked as Karch's book, which is a subsequent publication, in order to decipher: "Did Karch actually believe that anyone on LSD had ever died of excited delirium?"

And while he doesn't make that specific statement, the fact that he cites the fact that no one's ever died of LSD, I'm going to interpret that so as to mean that while he -- while Vilke has asserted that he's associated LSD with excited delirium on a subsequent publication a few years later, and I

doubt that he forgot his initial publication used earlier, he specifically cites that no one's ever died as a consequence of LSD. So I'm going to interpret that so as to mean that, you know, while I didn't read the article, they may have had excited delirium due to LSD, but apparently they didn't die.

Q Let me ask for your help. If you could try and focus on my question and answer, I'd like to get us out of here expeditiously.

My question simply is: Did you review any of the other articles cited by Dr. Vilke, other than the ones we've marked as Exhibit 11 or 12? Yes, you did; or, no, you didn't.

A Not that I know of.

Q All right. Thank you.

A Although, you know, I didn't read every article -- I didn't read all of the citations. And it may well be the case that I accidentally read one of them, and now I told you that I haven't reviewed them, but I haven't reviewed them in the context of this case.

Q Got it. When you did your report, why didn't you state that there was debate among forensic pathologists about whether the prone maximal restraint position led to positional asphyxia?

A For all the reasons we've discussed during this deposition.

Q Why didn't you make any reference to debate or

controversies in the medical literature in your report?

A What is the sentence that you just cited?

Q I haven't cited a sentence. I'm just asking you why you didn't point out in your report some of the things you've pointed out today, which there are those who've reached differing conclusions on this topic?

A This is an expression of my opinion. It is intuitive to obviously a casual observer, because this is subject to litigation, there's going to be divergent opinions.

Q Have you done any testing or research regarding prone maximal restraint position?

A No.

Q Or positional asphyxia?

A No.

Q Have you done any testing on that topic?

A No.

Q Done any lecturing on that topic?

A I do lecture at the local college and have lectured to the University of Colorado medical students, and -- although I don't do it now, and have spoken at the Colorado Coroners Association.

Although, at the Coroners Association, I don't recall speaking on restraint asphyxia. But in other lectures it's certainly one of the topics that we cover.

Q Outside the work that you've done in this case, have

you ever reviewed the literature pertaining to positional asphyxia?

A Yes.

Q Have you --

A It'd be in the context -- I think I've told you that I've had cases where excited delirium was in the differential diagnosis. In that context, I would refresh my memory on what people had to say about specific issues. So I --

Q For your opinions in this case, did you assume that the oxygen saturation reading was accurate?

A Being a clinical pathologist, obviously I'm well aware of the sensitivity and specificity of different measurements. I'm well aware that measurements may or may not be precise and also may or may not be accurate, and precision and accuracy are different.

But I understand it's going to be one of the issues that is admitted into evidence in this case. I also understand it's -- it's one of the measurements upon which -- because it's in the medical record and also because it's routine, that if you have a measurement that for some reason you don't believe, the community standard of practice is to repeat the stupid measurement and find out whether it's accurate or not.

I am well aware that -- at least according to the medical record, it wasn't repeated. In light of the fact it wasn't repeated, well, assumptions are prone to make people, as

you know, look asinine.

Notwithstanding that admonition, I say to you that, if a measurement is not repeated, they're -- either someone made a catastrophic error; they suspected it wasn't accurate and didn't repeat it, which is seriously problematic; or based on the clinical situation, at least the people in that situation believed that it might be accurate.

Have I successfully communicated the fact that it might not be accurate, but no one repeated it, and the people that were there apparently didn't feel the need to repeat it and didn't repeat it, and based on his struggling activity, it's credible to believe that he may well have experienced that.

Q I thought I asked a simple and clear question. I'll try it again.

A You did, but the answer isn't as simple as the question.

Q Let me try it again, and see if you can answer it directly. For purposes of forming your opinions in the case, did you rely upon the O2 saturation level of 90 percent as being accurate?

A As a forensic pathologist and as a clinical pathologist, I'm well aware that it may or may not be accurate.

Q Did you reach a conclusion one way or the other?

A Well, I answered that question previously, and it

was -- I give it a degree of probability of being accurate.

Q Okay. But you --

A Based on the fact that it wasn't repeated, it's probably more accurate -- at least they thought it might be accurate because they didn't repeat it.

But, again, nobody is perfect. It could be inaccurate. I'm well aware of that, not only because I'm a forensic pathologist, but because I'm a clinical pathologist. It could be inaccurate. I'm well aware of that. I know that it exists, and it's something that I have to deal with.

Q Okay. An oxygen saturation level of 90 percent is not fatal in and of itself, is it?

A I agree.

Q There was no reference by any medical provider about Mr. Goode having difficulty breathing, was there?

MR. McINTOSH: Marty?

MR. PHILLIPS: Yes.

MR. McINTOSH: This is John Mark. You cut out on that last question. Would you mind repeating it?

THE WITNESS: No, I'm just -- I'm reviewing the record. That's why you're not hearing anything, 'cause I'm not saying anything.

MR. McINTOSH: I know. I did not hear Marty's question, but --

MR. PHILLIPS: I think I can repeat it while the

doctor's looking. I think I asked: There was no evidence in the medical record by any provider that Mr. Goode had difficulty breathing? If that was not it, that's close.

MR. McINTOSH: Thank you.

A I believe I agree with you.

Q (BY MR. PHILLIPS) There was no indication in the medical record of his having any discoloration, was there? Before the code?

A I believe I agree with you.

Q You didn't do an autopsy in this case, did you?

A That is correct.

Q Do you know why the Plaintiff sought your services since they already had Dr. Wecht disclosed as an expert?

A I asked that question. I'm aware.

Q And what information were you given?

A They put an inquiry on some type of legal chat room and got my name from an individual who I had worked with some 20 years ago in Florida.

Q Did you ask why they needed you if they already had Dr. Wecht, who had done a private autopsy?

A Apparently, the person in Florida said I was a good guy, and -- no, I'm being serious. I was a good guy and knew my medicine. That's my understanding, you know, through hearsay.

Q You have seen a copy of the notice for your

deposition that we served today, right?

A Yes.

Q And you're aware that it asked you to bring certain things with you to the deposition?

A Yes.

Q And have you endeavored to comply with that request?

A Yes.

MR. PHILLIPS: I wanna mark the deposition notice as the next exhibit, and that would be No. 13; is that right?

(Exhibit 13 marked for examination.)

Q (BY MR. PHILLIPS) Before I get back to the deposition notice, Doctor, we were talking a moment ago about the O2 saturation level.

A Yes.

Q If the O2 saturation level were not actually 90 percent, would that impact any opinion you hold in this case?

A It wouldn't change it, no.

Q With regard to the deposition notice, you were asked to bring your entire file in connection with the case. Have you done that?

A Yes, I have.

Q What do you have that we've not previously identified?

A I have this binder, which you-all have been looking at, with multiple tabs. I have a package that contains the Vilke articles, which we have identified.

Q Those are Exhibits 11 and 12?

A I believe so. His Curriculum Vitae and his opinion which we've not identified.

Q You identified that for us earlier, didn't you? His report of February 2017?

A I said I had -- I don't know if we marked it as an exhibit.

Q No, no, we didn't.

A Okay.

Q But you did identify it for the record.

A I indicated to you that I do not have a hard copy with me today, but I have reviewed the deposition by the civilian female in the emergency room and also Dr. Barnhart.

Q Did you make any markings on those depositions?

A I haven't, but I only have them in a PDF format. So I haven't -- I don't write -- you can't write on them. At least I don't have the program necessary to write on a PDF document.

Q You have made markings in this binder, though, that Mr. Edwards is currently looking at, right?

A Markings there. Also markings on various of the pages, as you have seen of the Vilke package.

Q All right.

MR. PHILLIPS: Let's mark the binder as Exhibit 14, and I wanna be sure we get a color copy of that that captures your highlights and markings.

Q (BY MR. PHILLIPS) What else do you have that we have not identified or marked as an exhibit?

A We have identified the glass slides.

Q Yes.

A I think -- I think we're good.

Q Item 2 asked you to bring all the records, data, and other matters or information you reviewed in order to form your opinions in the case.

Have you done that, and have we identified those matters already?

A Right, with the exception I commented. And that is, as we've discussed, you know, I have contemplated cases similar to this on multiple occasions, and I have not brought all of those autopsy reports. But over the course of decades, those, obviously, you know, contribute to my opinion.

Q Yes, but this is specifically asking for things that you reviewed in order to form your opinions. And I'm interested in knowing if we have that.

A Yes, you do.

Q Okay. Do you have records showing your income from expert witness work?

MR. EDWARDS: He -- he has all of his work -- what do you mean? Everything he does is -- is as an expert witness. If you wanna know the percentage of his income related to consulting with attorneys like me, the percentage, which is all you're entitled to, he's -- he'll be glad to testify to that. He's not gonna give you any financial information.

Q (BY MR. PHILLIPS) Are you willing to tell me the amount of money that you make per year for your work in consulting with attorneys in civil cases like this?

A My salary is derived only for medicolegal consultation. I don't have any other jobs. As you know, I don't treat live patients.

This year, as in previous years, I'm contracted to consult to determine medicolegal cause of death so that my entire income -- I mean, I have a gross income for Michael Arnall, MD, PA.

THE REPORTER: I'm sorry?

THE WITNESS: Michael Arnall, MD, PA.

A That gross income is all derived from medicolegal consultation.

As far as consultations related to cases in which I did not do the autopsy, but I'm consulting on an external case, that is not my primary case, that I may do two or three of those cases in a given year. In some years, I've done as many

as 500 autopsies. All of my money is -- income is derived from consulting on those autopsies.

As you might imagine, anyone who is doing 500 cases has little or no time to do anything else. So that I tell you that, in a given year, I may have two or three cases that are not related directly to an autopsy that I performed or I'm being paid by either a district attorney or a public defender or, in rare instances, an autopsy I did may subsequently cause civil litigation to occur, and yet I'm caused -- I'm caused -- and that's why I delineated Dr. Barnhart as a fact witness, because she -- she did the autopsy.

In greater than 95 percent of all of my work, I'm a fact witness indicating what I did at the autopsy. Indeed, I express an opinion because I'm qualified as a -- as a forensic pathologist and asked, "Well, what's your opinion about this?"

But as far as consultation work for cases external to my personal practice, it may be two or three, maybe once in a while four cases in a year. But it is quite minimal.

Q Any notes that you have made about this case would be contained on the documents we've marked as exhibits; is that right?

A I have no other pieces of paper, lined or blank, that have notes on them. I find it easiest just to either put an arrow by a line that I find significant for a particular reason, or in some instances I actually make additional words

indicating why I thought that was significant.

But the majority of the time, if I put an arrow there, you know, I know why that sentence is pertinent, and that is my note.

Q All of your notes in this case would be contained on the documents we've marked as an exhibit; is that right?

A Every one.

Q Okay, good.

MR. GASS: Marty, could we just go off the record for a minute?

MR. PHILLIPS: Yeah.

(Discussion off record.)

MR. PHILLIPS: Back on the record.

Q (BY MR. PHILLIPS) You were asked to bring correspondence between you and Plaintiff's counsel, or any member of counsel's staff. Do you have correspondence that you've exchanged with Mr. Edwards or his firm?

A On the compensation?

Q Yes.

A He asked me what I charge.

I said, "It's $150-an-hour."

He said, "I will send you a check for $2500 as a retainer."

That was a verbal exchange, and I received a check for $2500 as a retainer.

Subsequent to that, I have submitted no bills. I'm -- my time spent on this case is still such that $150-an-hour, you know, times the hours I've spent, is still under the $2500.

So I've sent no additional bill. I know that's getting ahead of myself to -- to No. 6. But the 2500 is what I received, and I believe I'm still inside that retainer at $150-an-hour.

Q Do you have the bills that you've submitted in this case, or have there not been any yet?

A I just said I didn't.

Q Okay. That's what I understood. Do you know how much time you spent on the case before the deposition started today?

A You know, I have not quantitated that.

Q Do you keep records of time spent so you can submit accurate bills, when you do submit a bill?

A I do not keep an accurate record, and -- my bills aren't that accurate. That's just a concession of reality.

Q Have you ever advertised as an expert?

A No. I understand that my name, you know, appears somewhere on some list because people call me, but I -- I do not know what those are. And in this case I know that it was a specific word-of-mouth reference from a person who I know in Florida.

Q Do you have a copy of your current CV?
MR. EDWARDS: It's what you've got.
MR. PHILLIPS: It's the same as the --
MR. EDWARDS: Yes.
MR. PHILLIPS: Okay.
Q (BY MR. PHILLIPS) Were you provided with any facts or data from Plaintiff's counsel that you considered in forming your opinions?
A Yes.
Q Is it in the binder?
A Yes, it is.
Q Okay.
A And in the package from Vilke.
Q Okay. The Vilke articles in his report that --
A Yes.
Q -- that we talked about?
All right. Have you been provided with any other assumptions from Plaintiff's counsel that you've considered in forming your opinions?
A Nothing in addition to that.
Q All right. Have you considered any texts, treatises, journal articles, other than the ones that are mentioned in your report or other than the ones we've talked about here today?
A No, with the caveat that this is a topic about which

all forensic pathologists, including myself, have been reading for years.

So that, if there is some article that I have used to consider a similar case on a previous occasion, it -- obviously, there are other articles that I have read that aren't provided. They weren't used specifically in this case, but there are certainly numerous other articles that I've read in consideration of similar cases on previous occasions, and those obviously play a part in the opinion I formed in this case.

Q Do you intend to use any sort of summary or demonstrative aid with any testimony you give at trial?

A At this time, I have no such intent. I've not created any exhibits. I haven't promised I'm going to create any exhibits or demonstratives, but I don't know what I'm going to be asked for in the future.

Q I think that there are some textbooks lying on the table to which you've not yet made reference. Is there anything you need to tell us about any of the other, I guess, three textbooks or so that we've not made reference to here?

A Goodman & Gilman as a specific reference to no deaths related to LSD on -- (reading). I'm looking for the page. I'm looking on Page 311 of "Pharmacological Basis of Therapeutics," Fifth Edition.

And on Page 311, it states: "In man, deaths

attributable to direct drug effects are unknown, although fatal accidents and suicides during states of LSD intoxication have been reported."

Q We'll mark that excerpt from Goodman & Gilman as Exhibit 15.

A That's the last paragraph of Page 311.

MR. GASS: Thank you.

A I believe I tangentially referenced Goodman & Gilman, although I will cite -- I mean, Harrison's --

Q (BY MR. PHILLIPS) Harrison's?

A -- Principles of -- I'm looking at Goodman and -- I'm sorry. I'm looking at Harrison's textbook, "Principles of Internal Medicine," and the Edition is 11th, Page 2,117, Column 1.

First paragraph: "To date there have been no clinical reports of death caused by the direct effects of LSD."

Q We'll mark that excerpt as Exhibit 16.

MR. GASS: Thank you.

Q (BY MR. PHILLIPS) I think the only remaining text to which you may not have made reference to is Tintinalli. Is there any particular reference you made to it?

A (Looking.)

Q Is there any particular reference that you've made reference to from Tintinalli? If not, we need not spend any more time on this.

A There was a reason I brought this, and -- spppha. I can't find it immediately. And, in addition, I'll -- I'll summarize it. It was a reference -- you'd asked me about the administration of lorazepam. That's an issue we've discussed in this deposition. And I stated to you that it was problematic if you don't monitor the patient after you give lorazepam.

This was merely a reference that asserted that continuous monitoring of the patient after administration of lorazepam is recommended. So I -- I've given you that statement. This was merely one of innumerable references which indicate that that's appropriate.

Q Was there any reference that you made to the DiMaio "Forensic Pathology" text? I'm not sure we --

A DiMaio is the same individual who published the other text. And, you know, I brought that, if that was something that was going to be referenced.

Q Is there any particular part of that text, that you hold in your hand, that you make reference to?

A Obviously, coming to a deposition, I don't know the questions you're gonna ask, but I know potential questions that are gonna be asked.

And you've asked some questions in reference to -- to obviously the documents that I received from Vilke. And, you know, I didn't know how in depth you were gonna cover the

position between my opinion and his. Although, as I said, it's different, as -- as you know.

There are other areas of his opinion which you haven't covered. So I haven't made opinions on it, and I don't know if references in the text are relevant, because you haven't asked any questions on those topics.

Q So there's nothing about the "Forensic Pathology" text, Second Edition, that you need to make reference to based on anything we've talked about or any opinion you've expressed in your report?

A I agree.

Q Okay. Can excited delirium deaths occur in the absence of restraint?

A Yes.

Q Can excited delirium cause cardiac arrhythmia?

A Yes.

Q Is excited delirium something that is not because of a drug overdose but rather a reaction that occurs at a recreational level?

A Yes.

Q Can people die of excited delirium even if they are restrained in the supine position?

A I believe so, yes.

Q Is it your contention that LSD was helpful to Troy Goode?

A I made the comment in the report, I believe, that insomuch as I believe he experienced a metabolic acidosis in a paradoxical sense, his hyperventilation and screaming, as noted by the medical personnel, is a compensatory mechanism. That is to say, a compensatory respiratory alkalosis that compensates for the metabolic acidosis of straining against the restraints, the isometric exercise.

So that, in some ironic sense, not a therapeutic sense, and you never treat a person with LSD for this purpose, but in this particular case, hyperventilation and screaming perhaps even inadvertently acted as a compensatory mechanism to equilibrate --

THE REPORTER: To what?

THE WITNESS: Equilibrate.

A -- his blood pH that was acidotic, in my opinion, due to the isometric exercise.

Q (BY MR. PHILLIPS) Was Mr. Goode psychotic in the emergency room?

A His behavior could be termed as psychotic. I'm not so sure that the diagnosis of clinical psychosis would be appropriate to a person under the effects of LSD, but his behavior certainly appeared psychotic.

Q I noticed in reviewing your CV, Dr. Arnall, that there are several positions that you have previously held that you no longer hold; is that right?

A Correct.

Q Have you ever been fired from any position you've held?

A Fired? Certainly I've never received a termination letter. The coroners in the state have the ability to call whoever they want. And the coroner in Boulder stopped using me, but no firing, that I know of.

And I ran against the coroner in Adams County, and that coroner stopped using me. Perhaps it was unwise to run against them in a general election. But I don't know that there was any letter of firing, but they certainly stopped using me.

Q Why was it you left your position in Florida?

A In the case of Southwest Florida, the group relinquished their practice at two smaller hospitals, and I picked up those hospitals. So the group no longer used those hospitals, but the hospitals were happy to see me there. So that's why I wouldn't call it a firing, because they continued to ask for my services. It's just that the group -- they sold their office, and the senior member retired.

As far as Belle Glade Hospital, there was an opportunity to move to Lawnwood Regional Medical Center, and so I seized that opportunity. Belle Glade Hospital actively contemplated publicly closing their hospital for -- 'cause it was not cost effective. So I merely jumped ship from Belle

Glade, and that was also substantially the reason for Clewiston.

In Lawnwood Regional Medical Center, I had an acrimonious relationship with two other pathologists at some certain point. The hospital was rated by the Federal Bureau of Investigation. The other two pathologists were arrested by the Department of Justice and pled guilty to some criminal charges.

That acrimony led to a very uncomfortable relationship. And it obviously didn't seem as though that was going anywhere positive, insomuch as doctors had been arrested and lost their license as a direct consequence of irregularities that I had observed.

Q Why did you leave your position at Adams County, Colorado?

A I ran against the coroner, and she stopped using me. She never enunciated why she stopped using me, but I certainly ran against her in the election, and I believe I became a political liability.

Q Why did you leave your position in Larimer County, Colorado?

A The individuals in Larimer County cross-covered for me, and I cross-covered for them. And at a certain point, while they did not enunciate the reason they did not want to cross-cover for me, they decided not to cross-cover for me, and they did not need me to cross-cover for them after they started

cross-covering for me. I worked there predominantly on weekends only. I didn't work there full-time.

Q Why did you leave your position in Weld County, Colorado?

A It's the same group. They're side-by-side.

Q Why did you leave the position in New Zealand?

A I had a chance to go down to work for the Ministry of Justice in New Zealand. The Ministry of Justice and the Department of Pathology is chronically short of forensic pathologists.

So, while it's usually very difficult to get a job down there, if you have a -- a needed specialty, it's very easy. So they had hired the individual who trained me for a six-month rotation, and then rehired him and his wife for a 18-month rotation.

When they came back to the states, as is routinely the case, the organization down there advertised for a forensic pathologist. And I picked up a four-and-a-half-month stint down for the Ministry of Justice.

I did that during a time period where I was not working for Adams County. On an occasion previous to the time that the female coroner stopped using me, there was a male coroner.

That situation was a situation where the female employees in the coroner's office, under the male coroner, came

to me and said that they wanted me to do something. And, in particular, they wanted me to stop their supervisor from giving them invited massages.

So that I indicated to the coroner and the supervisor that they were gonna have to stop touching the girls. And that led to the firing of the supervisor. But, subsequent to that, the elected coroner used the closed-circuit equipment in the autopsy room to follow the women around, looking at the area between their chin and their bellybutton. So that the women asked me to take a picture of the monitor we had, so they could fire a federal -- file a federal complaint.

So I took that picture of the monitor. Within three minutes, the elected coroner had come in, had ordered that evidence that was going to be used in a federal complaint to be destroyed and then fired me. That went to litigation, and the collection of female employees and I got a $1.6 million settlement through litigation.

And it was during that time period, that I was discharged from the coroner's office, that I went down to New Zealand.

Q Discharged from which coroner's office?

A Adams County Coroner's Office --

Q Okay.

A -- by the male coroner. After that was over, one of the female Plaintiffs and myself ran for office, I in one

party, she in the other. She won the election, and it is my belief that I remained a political liability since I was able to run for election on subsequent occasions as well. Although, she never verbalized that.

Q Why did you leave your position in Boulder County?

A That was never verbalized, but I will tell you that there was -- the last case I ever did there was a case in which a woman had come to Boulder for an abortion, a late-term abortion, from out of state, was staying at a hotel or motel, and had delivered the child in a motel.

I was assigned to do the autopsy on the child, to determine whether the child had been delivered alive and killed or delivered dead.

During that autopsy, the police officer and the coroner's office's employee talked extensively about prosecuting the woman for homicide.

However, it was obvious from the autopsy that this was a natural death related to nuchal cord, the cord wrapped around the child's head -- neck multiple times.

In response to my determination that there was no crime committed, despite the fact that the coroner's office's representative and police officer seemed dead intent on pursuing homicide charges, the coroner went doctor-shopping and got a second autopsy.

The second autopsy revealed the same thing as the

first, nuchal cord, natural cause of death. Neither the pathologist who did the second autopsy, Rob Kurtzman, nor I, ever did another case for Boulder County.

Now, no reason was put down on paper. So it is speculation on my part that the last case I did and the last case that Dr. Kurtzman did was the cause for the fact that we were never called again. So that is speculation. None of that was ever verbalized, none of that was ever put in writing.

Q Why did you leave your position in Broomfield County, Colorado.

A Broomfield and Adams have a joint contract. So whoever does the autopsies for Adams does the autopsies for a very small county called Broomfield.

Q Other than the one place you identified where there was an acrimonious relationship that you had with some of the other pathologists, were there any other places you worked where you had an acrimonious relationship with the other pathologists?

A Well, not exactly as -- 'cause one of them apparently attempted to hire an undercover police officer to assassinate the other. So nothing's been as acrimonious as -- and that's not a joke, actually. It's in the Miami Herald. Nothing has been as acrimonious, and no other people have been arrested other than in that case.

Q Has there -- has there ever been a place, where you

weren't terminated, but you were asked to leave or forced to resign in lieu of termination?

A Well, I told you about the elected coroner in Adams County, who, over the course of three minutes, both ordered evidence destroyed that was gonna be used in a complaint and also -- and fired -- said, "You're outta here."

And I actually have an audio recording of that, of that firing. But, again, that was subject to litigation and --

Q Is there any other instance besides that where you resigned in lieu of termination or have been terminated?

A No. And in New Zealand they offered me a permanent position before I came back. So that -- obviously, that was the opposite of firing. They asked me to stay on forever.

Q Do you hold any medical examiner or coroner position currently?

A Coroners are elected. I have not been elected to office, and I'm not a formal -- using the term "medical examiner," formally as appointed by a governmental agency, no.

There are prosecuting attorneys who will refer to me colloquially as the medical examiner because -- to designate me as doctor, as opposed to a non-physician coroner in the State of Colorado. But no formal appointment as a medical examiner by a governmental authority and no elected position as a coroner.

Q Have you ever done an autopsy of a person who was

restrained at the time of death where you concluded that the death was not related to the restraint?

A There may have been a person who was in handcuffs running away and shot, but that's not what you're referring to. But I think there's an answer to your question, but -- but I know it's not what you're referring to. Who was restrained and I did not diagnose the death related to the restraint?

Q Yes, a patient who was in restraints at the time of his or her death, which you concluded the death was not related to the restraint or manner of restraint.

A No.

Q Have you ever been arrested?

A No.

Q Do you have privileges at any hospital currently?

A No.

Q When have you last had any hospital privileges?

A Lawnwood Regional Medical Center, 2004.

THE REPORTER: Where? I'm sorry.

THE WITNESS: Lawnwood, L-A-W-N-W-O-O-D.

A And that was where doctors got arrested, and that wasn't a profitable situation.

Q (BY MR. PHILLIPS) Have you ever had any hospital privileges revoked or restricted?

A No.

Q Have you ever had any adverse action taken on your medical license in any state?

A No.

Q Are your board certifications reflected on your CV?

A I'm sure they are, yes.

Q Okay. And any publications you have are also reflected on the CV?

A There's one pub and one presentation at a meeting, but those are minimal. Just -- there's just two on -- at the end of the CV.

Q And they have nothing to do with the issues we're discussing in this case, right?

A Correct.

Q As an expert witness in a civil case, have you been involved in any other case involving restraint besides this one?

A In a civil case. I've been involved in civil cases where there was a death in a prison, but it wasn't related to four-point restraint or any -- I don't think I've been involved in a civil case where I didn't do, you know, the autopsy. I don't think I've ever been consulted, you know, in a case where I didn't do the autopsy, in a case where hogtie or any type of four-point restraint was involved.

Although, I have testified in civil cases, but they're related to other, you know, problems of patients who

were in a prison, but it wasn't restraint per se.

Q Have you given any deposition testimony, that you can recall, that pertained to positional asphyxia or excited delirium?

A Deposition. In Florida, we do depositions in criminal cases, but we don't do depositions in criminal cases in Colorado. I don't recall any restraint deaths that I did in Florida.

As we discussed, even the use of the term of "homicide" in the State of Colorado usually does not end up in criminal litigation, because the district attorney understands that the medical term "homicide" is not equivalent to the legal term "homicide."

So I don't recall any depositions in which four-point restraint, maximal restraint, hogtie restraint -- I don't recall any, no.

Q Or excited delirium?

A Or -- strangulation, yes. But excited delirium, hogtie, no.

Q Okay.

A It was a civil case that had -- that it had to do with --

Q Mr. Edwards and his firm are the ones who retained you to be involved in this case, obviously. Have you worked with them before?

A Never.
Q Did you know them before this case?
A None whatsoever. In fact, I didn't understand how he got ahold of me.
Q And you learned later it was through that chat room that you told us about?
A Yes.
Q How many civil cases have you reviewed as an expert witness?
MR. EDWARDS: Within the past four years. That's all he's required to produce.
MR. PHILLIPS: I don't think I'm confined to that.
MR. EDWARDS: I think you are. I think the rule specifically says, and we've disclosed -- I mean, to talk about 20,000 autopsies?
MR. GASS: In civil cases?
MR. EDWARDS: How many civil cases have you been involved in? Can you remember?
MR. GASS: (No response.)
MR. EDWARDS: That's what I thought.
A I am asked to review either a case I've done -- I may get a call from an attorney. Even though I've done the autopsy, I may still get a call, "What are your thoughts?"
And there are other attorneys, including but not

limited to my little brother, who will call me and ask me for my thoughts on a case. But it is usually a case those -- the vast majority do not -- to my knowledge, do not end up in litigation.

And I -- as I say, I don't recall any depositions on excited delirium except for the case where a person was, you know, put in a strangle-hold during an altercation at the bar. I'm sure that was excited delirium. It was just an intoxicated person put into a strangle-hold by a bouncer.

Q (BY MR. PHILLIPS) Have you given deposition testimony in any civil case at the request of any Defendant?

A I do a lot of criminal defense consultation. Let me contemplate civil defense. I certainly recall one case in which I testified for the defense, which was a -- the company that runs the jail in a -- an in-custody death. But that wasn't related to hogtie or restraint. That was related to withdrawal from a medication and subsequent dehydration. That was the defense for a -- a company in a -- and a physician who worked in the jail.

Q Can you recall having given trial testimony in a civil case at the request of the Defendant?

A Civil case. As I've said, I don't do very much civil work. I do a lot of criminal work and a lot of criminal defense. I don't recall, but I don't do very much civil work.

Q I know your report says that your fee in this case is

$150-an-hour. Is that your fee for all work in this case?

A It is a number which -- I'll tell you where it derives from. The State of Colorado pays $150-an-hour for expert testimony for an MD.

And I will tell you philosophically that, when I charge $150, no one asks me in court what my fee is, 'cause no one wants to hear the $150-an-hour. So that -- that is precisely my charge. It is a flat rate. If I'm working on your case, it's $150-an-hour.

Q Including deposition time, trial time, and everything?

A Flat rate.

MR. PHILLIPS: Doctor, others have been waiting very patiently to ask you questions. So I'm going to yield to them, and that'll give me a chance to reflect and see if I have other questions I may wanna ask you. But I appreciate your time.

Anybody on the phone have any questions?

MR. McINTOSH: Marty, this is John Mark McIntosh. Brad, do you wanna go ahead?

THE REPORTER: I can't understand you.

MR. DILLARD: I'm fine with doing that.

MR. McINTOSH: Okay, you go ahead.

MR. DILLARD: This is -- this is Brad Dillard. I represent The City of Southaven Defendants in this

case.

THE REPORTER: I can't understand.

MR. DILLARD: Can you hear me okay?

THE REPORTER: It's garbled.

MR. DILLARD: Hello?

THE REPORTER: It's not clear. I've had this --

MR. EDWARDS: Brad, she can't understand. You're garbled.

MR. DILLARD: Okay.

MR. EDWARDS: She cannot understand you.

THE WITNESS: Brad, go ahead and issue the question, and I'll try to repeat it. And if -- if the -- if my repetition of the question is close, then we'll proceed. Is that -- is that a fair way to proceed? Notwithstanding the difficulties of this electronic connection.

MR. DILLARD: Let's try to do that. I will speak slowly. If you have any difficulty hearing me, just let me know.

THE WITNESS: I will.

MR. DILLARD: Thank you.

THE REPORTER: And this is Brad, right?

MR. EDWARDS: Yeah, Brad Dillard.

MR. DILLARD: Brad Dillard for the Southaven Defendants.

THE WITNESS: Please proceed.

EXAMINATION

BY MR. DILLARD:

Q Doctor, the opinions that you are giving in this case are limited to cause of death, correct?

A I also issued an opinion as to the manner of death. So it's cause and manner.

Q You are not rendering opinions in regard to the specific manner in which the Southaven Police Department placed Mr. Goode into custody and detained him, are you?

A During this deposition, we have touched upon my opinions concerning different aspects of care, but I believe that I have stated that I'm not going to hold myself out as an expert.

And I've conceded that, even if I attempted to do so, it is unlikely that a judge would allow me to do so, based on my, you know, conceded lack of -- of, you know, formal training, you know, in -- certainly in emergency medicine.

And that segment certainly -- also applies to police procedures. I am not a police officer. I am not POST, P-O-S-T, trained. I have not attended a police academy.

Q And, similarly, Doctor, you would not render opinions in this case as to the standard of care for an EMT who may have transported Mr. Goode via ambulance to the Baptist ER; is that correct?

A I have touched on that issue insomuch as I have said that, if you believe the experimental works of Chan, that there should be no hypoxia. Then the presence of hypoxia might compel you to conclude that there had been some malevolent activity or pressure on the back.

However, I also have conceded that I'm -- you know, have no specific training in either emergency medicine, other than as a medical student, and certainly no training as an EMT.

So that I agree that it is unlikely that a judge would allow me to issue an opinion on that. And I have not been asked to issue an opinion on that, and I do not anticipate issuing an opinion other than to say that there are certain findings which, you know, the trier of fact may attend to.

But I'm not going to issue an opinion other than to say I am well aware of the facts that might lead a person to contemplate, you know, that issue. I will not render a definitive opinion on that.

Q On the third page of your report, you referenced that "Mr. Goode was taken to the ground by a K9 dog." What have you reviewed that would indicate to you that the K9 actually took Mr. Goode to the ground?

A And, again, I have -- I have nothing other than the -- you know, the reference by police. I have no photographs of Mr. Goode on the ground.

And that certainly may be a conjunction of the fact

that the K9 indeed -- and I don't think there's any dispute that the K9 did interact physically with Mr. Goode. And subsequent to that interaction, Mr. Goode was on the ground.

But I freely admit that I -- I was not there, and I do not have a videotape. And I will -- you know, obviously, my opinion as to that sequence of events is not going to be admitted because I wasn't there, and I didn't see it.

I just understand that there was a physical interaction between Mr. Goode and the dog, K9. And at a subsequent time period, Mr. Goode was on the ground. That is the extent of my assertion in that instance.

Q You go on to state that "Serious bite wounds were inflicted on Mr. Goode's arm." What knowledge would you have about the nature of the serious bite wounds?

A I believe if you go to the medical record -- and I'm looking at it right now. Give me a moment to reference the specific -- I am looking at the emergency department provider notes by Dr. Oliver, on my Page 4, which merely states:

"He then opened the door to the police dog unit and was bitten by the police dog."

I go to Page 3, where the physical examination under "Musculoskeletal" reads: "Dog bite marks to left shoulder and upper arm."

And then I believe that there is a general reference to abrasions and contusions under "Evidence of Injury" in the

Autopsy Report. Although, I do not believe the Autopsy Report specifies that those abrasions and contusions are diagnostic of a bite.

However, on Page 4 of 4, the Autopsy Report states: "Abrasions and lacerations/puncture wounds of the left lower arm were consistent with a reported K9 unit bite."

So that would be the extent of the documentation in the medical record and Autopsy Report concerning bite marks.

Q You go on to state, Doctor, that "Mr. Goode was also hit by a Taser dart fired by an Officer."

In making that statement, are you asserting that Mr. Goode was actually shot by use of a Taser or that it was simply deployed and one dart struck him?

A I will tell you that I specifically looked in the Autopsy Report to determine whether there were a pair of characteristic puncture marks, and I did not find any reference to Taser puncture marks in the Autopsy Report.

I will tell you that, while I cannot cite the specific reference -- and you probably don't want me to take the time to do so. It is my recollection that an electrical discharge was not administered because both electrodes did not securely strike.

It is my recollection that only one electrode struck, and one did not. Although, I tell you that, in looking at the Autopsy Report, I see no reference to any type of puncture mark

related to either one or two electrodes.

Q Doctor, further down on that same page, there's a statement that the ambulance in a non-emergent manner leisurely transferred Mr. Goode to Baptist Memorial Hospital-Desoto.

You're not rendering any opinion in this case that a delay in transfer caused or contributed to Mr. Goode's death, are you?

A I agree with your statement. In fact, to the contrary, I've specifically cited the prolonged nature of the interaction as exacerbating what I believe to be metabolic acidosis.

Q Continuing on to the next page of your report, the second paragraph, it states that "At 8:33 p.m., Mr. Goode was triaged at Baptist."

Do you recognize this as the point that care transitioned from the Southaven EMTs to the Baptist Emergency Room Department?

A I'm going to give you a -- a more verbose answer, but it's not because of any attempt to hide the ball. Under any other circumstances, I would say that, when a patient is triaged in an emergency department, I would opine that care has formally transitioned.

The reason I qualify that statement, in this particular case, is that it is my understanding that there has been an assertion that the supervision of the medical status of

the patient was (a) conducted by a police officer, not a paramedic, but a police officer; and (b) that the supervision complied with the community standard of practice.

So I understand that caveat does not include any allegation of paramedic supervision of the patient in the emergency room, but I issue that caveat because I understand that this case has a bit of a departure from any other circumstance in which I would opine that, once a patient is triaged in an emergency department, medical care has transitioned formally and practically for all purposes.

Q Would you agree, Doctor, that the Baptist ER would provide a higher level of care than either EMTs or police officers could provide either on the scene or via transportation in an ambulance?

A Again, this is not argumentative. But, in this particular case, it's my understanding that the paramedics actually had continuous cardiac monitoring. And that's something that, as I have already stated, to the best of my knowledge, was not provided by the hospital.

So, ironically, while generally speaking you are correct a hospital should be able to provide a superior level of care in this case, because of the specific issues, it may well be the case that one could reasonably argue that the paramedics provided a superior level of care. I understand the irony of that statement, but I've also explained the nature of

it.

Q Let me rephrase that question just slightly. Would you expect a hospital ER to be able to provide a higher standard of care by their trained nurses and physicians and equipment available in the ER department?

A Yes, of course.

Q You were asked a few questions by Mr. Phillips concerning pressure on Mr. Goode's back. And on the next page, I believe, of your report -- it's on the same page where at the bottom there's a heading style "The Baptist Medical Records."

A Yes.

Q Midway in the middle of that page, there's a statement that "Testimony in the case appears to have established that officers applied weight to Mr. Goode's back during restraint."

Do you see that statement?

A Wait a second. I see that statement. And I -- right now, I don't recall specifically where I got that from. I will have to go back and -- to the -- to the statements that I've read, to determine exactly where I got that. I can't show that to you right -- that's my understanding.

But, again, I say to you I was not present. I did not see it. And, you know, it is unlikely that my hearsay testimony would be allowed in any -- in any -- at any point.

MR. EDWARDS: Well, that's not correct. If you

don't recall, you don't recall.

A I don't recall it. I'll have to -- I'll have to figure out where I got that from.

Q (BY MR. DILLARD) And my question in regard to that, Doctor, is: Would it be fair to say that nowhere in your report do you indicate or attempt to quantify the amount of weight that may have been applied to Mr. Goode's back during restraint or how long a period of time that that weight may have been applied?

A I agree.

Q I'm gonna flip over to the very last substantive page of your report, which would be essentially Page 2 of your opinions. Are you there, Doctor?

A Here.

Q Thank you. The last full paragraph of your opinion states that: "Based upon a reasonable degree of medical certainty, Mr. Goode's death was caused by the manner of restraint and positioning (precipitating asphyxia) and the subsequent intravenous administration of chemical restraints which exacerbated asphyxia and ultimately precipitated cardio-pulmonary arrest" (sic).

A That is correct.

Q Did I read that correctly?

A Yes, you did.

Q Okay. So, am I correct that, in your opinion, these

two events in combination precipitated Mr. Goode's death?

A Yes.

Q The manner of restraint and positioning, would you indicate precipitated asphyxia?

A And, as I have said, inevitably exacerbated the problem with metabolic acidosis. Yes.

Q And the second part of your opinion, the subsequent intravenous administration of chemical restraints, you opine exacerbated or worsened the asphyxia, correct?

A Correct.

Q And am I reading this correctly that, when you say the subsequent intravenous administration of chemical restraints, which exacerbated asphyxia and ultimately precipitated cardiopulmonary arrest -- are you opining that the administration of the restraint is what ultimately precipitated the cardiopulmonary arrest?

A It was certainly the last straw among straws. It was the last physiologic challenge. It was the last event, and I believe a medically significant event obviously, and contributed to the cardiopulmonary arrest.

Q How quickly, in your experience, Doctor, if you know, would repositioning or use of a different type of restraint have reduced or eliminated any respiratory compromise that you have testified to today?

A Well, the respiratory compromise would be quite

quick. The resolution of the metabolic acidosis would take longer. But the -- the resolution of the respiratory compromise would be less than one minute.

And, again, I'll add, notwithstanding the -- the -- the -- the obvious fact here that the entire period of struggle had obviously caused exhaustion. But, all things being equal, repositioning him would improve his condition.

Q Do you have an opinion, Doctor, as to the latest point in time that repositioning or a change in restraints or some other intervention would have prevented Mr. Goode's death, in your opinion?

A Certainly timing is an issue about which we are frequently asked. And empirically it took this long. It is difficult to say with precision -- and I certainly could not cite you any references to, you know, specify a metric answer to your question. I can't tell you how much sooner would have avoided this problem. I have no --

Q Are you able --

A Go ahead.

Q I'm sorry, Doctor, go ahead.

A I'm just reiterating I can't do that; I don't know how to do that.

Q And I understand your testimony that you can't perhaps break this down to a certain minute or second. So let's use some sort of general time frames that you have listed

in your report, one of which being the 8:33 p.m. triage at Baptist.

Would you be able to opine, to a reasonable degree of medical certainty, whether any changes in positioning, changes in restraints, or other medical interventions would have prevented death if implemented before or after the 8:33 p.m. triage period?

A I believe it is fair to say that, the sooner changes were initiated, the more likely a favorable outcome. And when you ask about the triage time period, that is a significant time period before respiratory arrest.

So I believe, generally speaking, although I cannot quantitate it, that a resolution of the -- what I believe to be the precipitating factors in a significantly improved time period, would have significantly improved his probability of survival.

Q Doctor, I'm not sure if I've -- if I totally understood your -- your response. Are you saying that repositioning or a change in restraints or another medical intervention, if implemented after the 8:33 p.m. triage period, would more likely than not, in your opinion, have resulted in Mr. Goode surviving?

A Generally speaking, yes. However, I call to your attention that that question doesn't take into account the administration of the chemical restraint, the Ativan, the

lorazepam, which I obviously freely stated contributed.

But it is fair to say that, if you had improved his physical condition and also if you had failed to administer a respiratory depressant, lorazepam, then his probability of survival would likely have been improved. And I -- I think that's easy for everyone to understand in light of the opinion that I have expressed.

I would point out to you that, while on triage, whether it's right or whether it's wrong, the pulse oximetry was 90, which I've said is on the cusp of oxygen therapy. If one had -- taking him at that point, one would say, "Well, he obviously is alive at that point."

If you had failed to exacerbate his physiologic dilemma, there's good reason to believe he would have continued to be alive.

And that triage point, with his pulse oximetry of 90, is the point at which care, to a significant degree or to a total degree, transitioned from paramedics to emergency department. There's still some ambiquity as to whether care transitioned from police to emergency department at the time of triage.

Q Okay.

MR. DILLARD: Thank you, Doctor. I'll tender the witness.

THE REPORTER: How much --

MR. McINTOSH: Doctor, this is John Mark McIntosh.

THE REPORTER: Just --

MR. McINTOSH: I represent the Defendant Baptist Memorial Hospital-Desoto, Inc. Are you able to hear me okay?

THE REPORTER: Mr. McIntosh, how long are do you think -- how long are we gonna go? I just need a few minutes to confirm a job for tomorrow.

MR. PHILLIPS: Want a quick break?

(Discussion off record at, recess taken 1:43 p.m. and back in session at 1:50 p.m.)

MR. McINTOSH: Doctor, as I said before we took a break, my name is John Mark McIntosh, and I represent the Defendant Baptist Memorial Hospital-Desoto, Inc. Are you able to hear me all right?

THE WITNESS: I am.

MR. McINTOSH: Please let me know if that changes.

THE WITNESS: I will.

EXAMINATION

BY MR. McINTOSH:

Q Doctor, I don't mean to -- to beat a dead horse, but since I'm last in line, I think I'll have to. Am I --

A I understand.

Q I'm sorry to interrupt you. Am I correct that you are not holding yourself out as an expert in the field of emergency nursing?

A Correct.

Q Would I also be correct that you have not been asked to offer nor do you plan to offer opinions as to the standard of care as to the nurses who rendered care and treatment to Mr. Goode on July 18, 2016?

A That is correct. I have made certain observations, but I -- I will not issue an opinion as to the standard of nursing care nor the standard of medical care. Even though, as you know, I have made observations, I will not issue an opinion on the standard of care by the nurses or doctors.

Q Doctor, I noticed in your report, under materials that you listed and you reviewed, you identified two videos. Other than the videos listed in your report, have you reviewed any other videos in connection with your review of this matter?

A Nope, not that -- I don't think so. All I've got is one disk, and that's it.

Q I also saw identified on there a single photo of Mr. Goode with his son. The same question, but with regard to photographs. Have you reviewed any other photographs, other than this photo of Mr. Goode with his son, in connection with your review of this case?

A You know, there's a USA Today article that was in this package, and that USA article may have -- may contain some kind of a photograph. I'm looking right now. Yeah, the USA article has a family photograph of son, father, and mother.

Q No other photographs that you've reviewed though, correct?

A Not that I recall, nope.

Q Okay. Is there any document, item, or material that you've requested in connection with your review that you have not been provided?

THE REPORTER: I'm sorry, I didn't hear -- I didn't hear the very first part. I'm sorry.

MR. EDWARDS: I didn't either.

MR. McINTOSH: Sorry. Let me repeat that. Thanks for letting me know.

Q (BY MR. McINTOSH) Is there any document, item, or material that you have requested in connection with your review that you have not received?

A I had made the comment to the Plaintiff's attorney that I would be willing to review the autopsy glass slides. We covered that topic. I have not reviewed them, but I would certainly be willing to review them.

Even as I say that, the findings of asthma are systemic. And it is unlikely that I would find any compelling findings of asthma on any other slides of the lung than the

ones I've already seen.

That is why I feel comfortable stating that, while I am well aware that I've not reviewed the Barnhart autopsy slides, it is unlikely that I am going to find any evidence of the systemic disease, asthma, present on her slides if they were not present on the Cyril Wecht slides.

Q So you've requested the slides from Dr. Barnhart; is that correct?

A I don't -- insomuch as I've said I'd be happy to review them, yeah, that counts as a request. But you understand the nature -- it's not a demand or an ultimatum. I've just said that, you know, it would be prudent for me to review slides.

As I've said to you, I have reviewed numerous slides of the lungs. And at this point, it is my professional opinion that additional review is unlikely to reveal anything in the way of asthma, because I have seen multiple sections of lung, and this is a systemic disease and is not present focally.

That is to say, it is extraordinarily uncommon that you would find evidence of asthma on one slide that you didn't find on all of the others.

Q Doctor, at this -- at this juncture, do you feel that you have been provided with sufficient factual materials in order to form your opinions in this case?

A Yes, I do. And that's -- that's clearly inherent in

the fact that I issued an opinion. But I will go further to reaffirm that, yes, when I issued the opinion, I believe that I had everything necessary to issue that opinion.

Q Have you ever personally spoken with Kelli Goode, Mr. Goode's widow?

A No.

Q Have you ever received any information, in writing or otherwise, from or authored by Mrs. Goode concerning the events of July 18, 2015?

A Not that I recall, no. If it's not in this package, and I don't recall anything in that package, I don't think I've seen anything from her.

Q Have you communicated directly with any eyewitnesses to the events underlying this lawsuit?

A None whatsoever.

Q Doctor, you were briefly asked earlier about when you were first contacted in connection with your review of this case. Can you provide me with an approximate date of when you were first contacted?

A It was probably in May or early June.

Q Of this year?

A Yes.

Q You testified earlier concerning a legal chat room where inquiry was made. Do you know the name of that legal chat room?

A Nope.
Q Do you know the number of the individual who worked with you 20 years ago that you testified to earlier?
A I remember her first name. It was Susan.
Q Doctor, in your report, under the "Factual Predicate" section on Page 2, you identify that Mr. Goode placed some LSD on his palm. What is the source of your understanding that Mr. Goode placed LSD on his palm?
A I don't recall that specifically, and I haven't referenced that.
Q Do you have any understanding as to the amount of LSD consumed or injected by Mr. Goode?
A I do not. And, as a forensic pathologist, I would tell you that the dosages are frequently nonuniform so that it would be difficult, even for the person who sold the drug, to determine the exact quantity of LSD that was present and the dosage given to any of the individuals who purchased it.
Q Do you have any understanding as to the source of the LSD that Mr. Goode ingested or consumed?
A Other than generally speaking, it was at or near a -- a concert. I have no names of any drug dealers.
Q Do you have any knowledge who, if anyone, is currently in possession of any of the remainder of the batch of LSD that Mr. Goode ingested or consumed?
A I do not know.

Q Do you know if that LSD has ever been tested?
A I do not.
Q Are you aware that Mr. Goode ingested LSD on two previous occasions in 2008 and 2013 which resulted in him being hospitalized?
MR. EDWARDS: Objection to the form.
A I haven't received any medical records about admissions. Although, I'm generally aware that this was not his first time with LSD.
Q (BY MR. McINTOSH) Would that make any difference in your conclusion you've reached in this case?
A No.
Q I believe you testified earlier, Doctor, that you are aware that Mr. Goode, on the toxicology report, had marijuana in his system; is that correct?
A I'm gonna get that in front of me right now.
Q My question is this, Doctor: Is there any particular reason why you failed to reference his use of marijuana in your report?
A I don't think it contributed to his death.
Q Doctor, I failed to ask you a question with regard to the LSD. Would you agree with me that Mr. Goode's LSD ingestion led to his encounter with the police, his arrest, and subsequent admission to the hospital?
MR. EDWARDS: Objection to the form.

A Yes.

Q (BY MR. McINTOSH) Doctor, did you find any reference, in your review of Mr. Goode's records from the hospital, that he was acutely asthmatic on July 18, 2015?

A No.

Q Doctor, is it your opinion that Mr. Goode was having difficulty breathing and in respiratory distress throughout the entirety of his admission to the emergency department?

A I have the -- the metric of the pulse oximetry, and it is my belief that his position of restraint did not change.

But restate your question one more time, please.

Q My question is this, Doctor: Is it your opinion that Mr. Goode was having difficulty breathing and in respiratory distress throughout the entirety of the time period that he was in the emergency department?

A I do not know that with certainty, and there's no medical record that gives metrics that would allow me to draw a conclusion.

Q Doctor, you were asked questions earlier about the accuracy of the blood oxygenation reading of 90 percent?

A I recall those questions.

Q Would you agree with me that the healthcare providers, who were present with Mr. Goode at the time of that reading, would be in the best position to assess the accuracy of that reading?

A I'd give you a general statement that it is sometimes a lamentation that individuals, looking at a situation with a retrospectoscope, may have a more accurate appraisal of the accuracy of any particular observation.

That having been said, I will agree that the physician on scene had the ability to examine this patient and perform additional tests.

In that sense, the position -- the physician on scene had the ability to perform a physical examination, auscultate the lungs, order additional testing, which it obviously is superior to my ability, where I only have the one measurement.

Q Doctor, do you accept as accurate the nurses' descriptions of Mr. Goode's behavior and condition in the medical records?

A With the caveat that I understand that there is a civilian female visitor to the emergency room, which has a divergent observation, I have said that there appears to be divergent opinions as to his behavior and condition.

But I've also agreed that there is no timestamp, that I recall, on the civilian female visitor observation, other than the patient was not in a room but on a gurney being transported when the observation was made.

So I am aware that there is controversy concerning the specific behavior of the patient, but I also understand that the nurses, you know, have entered their observations at

specific times.

I understand that's not a definitive answer, but it's also not intended to be a definitive answer, because I understand there's a controversy.

Q Doctor, can you identify for me any entries in the medical record as to Mr. Goode's condition and behavior which you believe to be inaccurate?

A I cannot.

Q Doctor, you -- you mentioned a moment ago the witness. Am I correct that you're speaking as to Janet Tharp?

THE REPORTER: As to who? Janet?

MR. McINTOSH: Tharp.

THE REPORTER: Oh.

MR. EDWARDS: Tharp, T-H-A-R-P.

A Yes.

Q (BY MR. McINTOSH) And you have reviewed her deposition, correct?

A Correct.

Q Do you recall, from your review of that deposition, how long Mrs. Tharp personally viewed Mr. Goode as he was wheeled by in the hallway?

A I don't have a metric, but it was my belief that the encounter was brief and only amounted to the period of time it took to pass her by.

Q In light of the limited time period that she observed

Mr. Goode, does that change your opinions as to the weight of her testimony?

A No.

Q Doctor, are you aware of any gross or microscopic pathological evidence that Mr. Goode experienced asphyxia on July 18, 2015?

A No. I am aware of the observation of hyperinflation and collapse, but I do not use that as a criteria for asphyxia.

Q So the answer would be "No," correct?

A It is "No," and that's the reason it's "No."

Q Doctor, do you know whether this case has been scheduled for trial?

A I asked that question, and it's my understanding that there may be a trial in June of next year. But, again, I'm not the right person to ask about that.

Q Have you been requested by counsel to appear at trial?

A They didn't make that specific request, but I infer that from -- why else would they be paying me?

Q Doctor, you were posed a question earlier as to whether or not -- if the blood oxygenation reading of 90 percent were not accurate, whether that would change your opinions, and I believe your response was that it would not.

A Correct.

Q Can you explain to me why that would not change your

opinion?

A The literature regarding this maximal restraint characteristically does not have metrics of oxygenation of the blood, and yet the forensic literature still accepts this as a diagnosis. So that in most cases in which this diagnosis is made, there are no metrics. There is no measured oxygenation of the blood.

I merely reiterate that, while literature with which we are all familiar, has been presented so as to challenge my opinion, there is at least one metric in this case which appears to be at odds with the published literature, and I think I've explained that in -- at length.

MR. McINTOSH: Thank you, Doctor. I have no further questions.

MR. EDWARDS: Do you have anymore?

MR. PHILLIPS: Not at this time.

MR. EDWARDS: Doctor, I have --

MR. MACAW: This is Matt --

MR. EDWARDS: Oh, I'm sorry, go ahead.

MR. MACAW: This is Matt Macaw for Southeastern Emergency Physicians. I have no questions.

MR. EDWARDS: All right. I do have a few questions for the Doctor. Let me see these, please.

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EXAMINATION

BY MR. EDWARDS:

Q I'm looking at the medical reports, and you were asked by Mr. Phillips, and maybe Mr. McIntosh also, about any indication in the medical records about respiratory distress. Do you recall that?

A Yes.

Q Look on Page 7 of the Baptist records and read what you've marked there.

A I believe I already responded to one of the questions initially, that the diagnosis was made by Dr. Oliver on Page 7 of respiratory failure.

And I believe the attorney followed up on that question by asking whether that diagnosis was made at or about the time of the cardiopulmonary arrest.

Q Okay. Is respiratory failure an indication of respiratory distress?

A I -- no, in truth I equate those. Yes, I do.

Q Doctor, you were also asked some questions by Mr. Phillips about Haldol. Do you remember that?

A I do.

Q Are you aware that the FDA issued a black-box warning concerning Haldol, indicating that it might cause problems with -- and you may have to help me -- with Torsades de Pointes?

A That's a cardiac -- that's a type of cardiac arrhythmia, Torsades de Pointes.

Q And QT prolongation?

A Again QT prolongation is a specific change in the electrocardiograms. And -- and I have spoken to the issue of respiratory depressant of lorazepam. I believe I stated that I had a -- a discomfort of intravenous administration of Haldol.

But, in this particular case, I read the description of the physician -- of the police officer as irregularity in breathing. And so that is why I tend to favor the irregular respirations as a consequence of the respiratory depressant effect of lorazepam, and I have not focused on the potential arrhythmogenic nature of intravenous Haldol. Although, I believe I indicated that I had a level of discomfort with that intravenous administration.

Q And is that because haloperidol, Haldol, is not approved for intravenous administration?

A And its association with, you know, problematic issues revolving around the heart.

Q Okay.

MR. EDWARDS: Let's mark that as the next exhibit, please.

(Discussion off record about numbering of exhibits, and Exhibit 17 marked for identification.)

MR. EDWARDS: Doctor, I --

MR. PHILLIPS: Let me just note an objection to Exhibit 17 as being beyond the scope of his disclosure opinions, but go ahead.

Q (BY MR. EDWARDS) Doctor, in the context of excited delirium, there is always, quote, sudden death, unquote; is that accurate?

MR. PHILLIPS: Objection, leading.

(Mr. Gass leaving.)

A The description in the literature, as well as the -- the -- the descriptions in the literature indicate that it is usually the case that the individuals attending the -- the individual in excited delirium are surprised at the change in medical status. So, yes.

Although, as I've indicated, in an individual who's developing exhaustion and respiratory acidosis, I'm not sure I would use the term it's unexpected, because I already know they have a physiologic challenge.

Q (BY MR. EDWARDS) So would you classify Troy Goode as a sudden death?

A Well, I haven't because I believe that the causes of his demise were prolonged over a period of many, many, many minutes. I think up to 90 minutes.

Q And that's not sudden death?

A That's not my definition.

Q Okay. Now, you've been asked repeatedly about Dr. DiMaio.

A Yes.

Q And -- and Dr. DiMaio has written on the subject of excited delirium; is that correct?

A Yes.

Q Okay. I wanna ask you about something from Dr. DiMaio's "Forensic Pathology" book, and where he's talking about certifying the cause of death related to excited delirium.

And let me read this to you and then ask you: "First is to sign out the cause of death as 'excited delirium' and then list 'struggle,' 'cocaine intoxication,' etc., as contributory causes."

Now, my question is: Do you agree with that?

A As I've said, there are lumpers and splitters in medicine, and I recall that DiMaio has specified the methodology in which he would sign out some of these cases.

So, you know, in some sense, I understand why he is saying that. In this -- in this instance, I agree -- as I've stated, there are likely multiple physiologic challenges to this individual. I specified those.

But I believe their -- their fundamental origin was substantially related to his maximal restraint hogtie position. But I've also told you that the last or ultimate or, you know,

end physiologic challenge was an administration of intravenous lorazepam, but you can't ignore the underlying physiologic condition in which, you know, an individual receives the intravenous lorazepam.

A person with exhaustion and metabolic acidosis is assuredly going to respond in a different fashion than a person who is at rest and comfortable and has no other physiologic challenges.

Q I understand. My question, and I'll simplify it for you: Doctor, Dr. DiMaio says for a forensic pathologist or to a forensic pathologist, "If you find a death to be from the diagnosis of excited delirium, you put that in the report"?

A I -- okay, I didn't understand. Yeah, if you have a diagnosis, you just say it.

Q Right.

A If you're diagnosing excited delirium, then you just write it down.

Q Did Dr. Barnhart write down "excited delirium"?

A Well, as we all know, the answer to that question is "No."

Q And did Dr. Barnhart expressly put a finding in her report that ruled out excited delirium; that is, of hyperthermia?

A As I've outlined, there are a number of metrics associated with excited delirium, and Dr. Barnhart's report

excludes those metrics, which I've already detailed.

Q Okay. You were also asked about some authorities -- let me see if I have those. You were asked about some authorities on whether or not putting somebody in a hogtie and in a restraint or -- I'm sorry -- in a -- a prone position causes the diminution of respiratory function. Do you recall those questions?

A We had extensive discussions on that topic.

Q Yeah. Okay. I beg your pardon. I've gotten my stuff out of whack here.

Okay. And you were asked about some European studies. Is the University of Vienna a reputable academic institution?

A I have no personal knowledge of the University of Vienna, other than to say that one of the heroes of pathology comes from Vienna. But that was in the 1700s.

So I have no personal knowledge of the University of Vienna. I would have to evaluate each opinion issued by one of their faculty members, you know, one-by-one.

Q Well, let me ask you about an opinion from the University of Virginia -- Vienna. "Hobble restraint in the prone position leads to a dramatic impairment of hemodynamics and respiration."

MR. PHILLIPS: Let me object as beyond the disclosure.

Q (BY MR. EDWARDS) You agree or disagree?
MR. McINTOSH: Join.
Q (BY MR. EDWARDS) You can answer. You -- you can --
A Obviously, it is my opinion that in this case the restraints contributed likely for more than one reason, both respiratory and metabolic acidosis, to the death. So I obviously do not contest that opinion.
Q Okay. And from UCLA, a report of -- from December 1992 to December 1998, there were 20 cases of excited delirium deaths associated with struggle and restraint that were witnessed by EMS personnel.
All sudden death victims in the series had been hobble-restrained. Are you familiar with those figures?
MR. PHILLIPS: I'll object to it being beyond the disclosure to the testimony of counsel and lack of foundation.
MR. EDWARDS: Okay. You may answer.
MR. McINTOSH: Join.
THE REPORTER: Wait a minute. Who's saying that on the other end?
MR. McINTOSH: This is John Mark McIntosh saying "Join."
THE REPORTER: Okay, thanks.
MR. DILLARD: This is Brad Dillard. Are

we agreeing that one objection by defense counsel will suffice for all? Or do we need --

MR. EDWARDS: Yeah, that's fine.

MR. DILLARD: -- individual --

MR. EDWARDS: Yes.

MR. DILLARD: Thank you.

A As I've said, you know, this is not the first time that -- that either I or any forensic pathologist has crossed this bridge, and that there are numerous individual articles that ultimately led to the opinions stated in the subsequent hard-bound medical textbooks.

So that I am aware that the authors of those hard-bound medical textbooks did not issue their opinions in a vacuum. There are numerous iterations of concerns regarding this issue. So that, as you bring them up one-by-one, those constitute merely the body of literature which led to the summation of those concerns in the published hard-bound texts.

Q (BY MR. EDWARDS) Is it your opinion that Mr. Goode went from breathing adequately to (snapping fingers) immediate cessation of breathing, or was there some stage of diminution of breathing?

A There is -- there are always -- well, in this case, it is my opinion that there were stages of diminution. I believe those -- that progress of diminution was described by the police officer, and I can either reiterate that from his

testimony, or we can just --

Q That's fine.

A -- accept my summary and move on.

Q Is -- is the -- is the change in respiration the reason that there should be a medically-trained person in the room with somebody that has received chemical restraints under the circumstances of Troy Goode?

MR. PHILLIPS: I'll object as calling for a standard-of-care opinion, lack of qualification, foundation, and beyond the disclosure.

Q (BY MR. EDWARDS) You may answer.

A Of course, the answer is "Yes."

Q All right.

MR. EDWARDS: No further questions.

MR. PHILLIPS: Would you give me the cite to the two articles you mentioned?

MR. EDWARDS: Yes, I'll -- actually, I'll --

MR. PHILLIPS: Or do you wanna just email them to me?

MR. EDWARDS: No, let's just mark them. Why don't we do that, so you'll have them.

MR. PHILLIPS: All right.

MR. EDWARDS: Okay. So --

MR. PHILLIPS: Subject to my objection, that's fine.

MR. EDWARDS: I understand. Okay. So the Vienna article is "Cardiorespiratory consequences to hobble restraint."

MR. PHILLIPS: That will be Exhibit 18?

THE REPORTER: Uh-huh.

MR. PHILLIPS: And then the UCLA article will be Exhibit 19?

THE REPORTER: (Nodding head.)

MR. EDWARDS: Yes, the article by Stratton. et al., from UCLA.

MR. PHILLIPS: Any other questions from anybody on the phone?

MR. McINTOSH. No further questions here. This is John Mark.

MR. DILLARD: This is Brad Dillard. No questions.

MR. EDWARDS: All right. We're good. We're hanging up. Thank you.

MR. PHILLIPS: Bye, fellas.

MR. EDWARDS: Oh, we're reserving signature.

(Deposition concluded at 2:30 p.m., and Exhibits 1, 2, 3, 4, 5, 6, 7, 8, 9, 11, 12, 14, 15, 16, 18, and 19 marked for identification.)

SIGNATURE OF WITNESS

I, **MICHAEL F. ARNALL, MD,** hereby certify that I have read the foregoing transcript of my deposition taken on the 19th day of October, 2017, and that I have listed all corrections thereto on the following page herein. Except for said corrections, it is a true and correct copy of my testimony given on that day.

_____
MICHAEL F. ARNALL, MD

( ) NO CORRECTIONS

( ) CORRECTIONS ATTACHED

STATE OF COLORADO)
) ss.
COUNTY OF)

Subscribed and sworn to before me this _____ day of _____, 2017.

_____
Notary Public

My commission expires: _____

PAGE	LINE	CORRECTION	REASON
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STATE OF COLORADO)
) ss.
COUNTY OF LA PLATA)

I, Sherry L. Rowe, a Registered Merit Reporter, Registered Professional Reporter, and Certified Shorthand Reporter, DO HEREBY CERTIFY that I did administer the oath to the witness herein, **MICHAEL F. ARNALL, MD**, prior to the taking of this deposition; that I did thereafter report in stenographic shorthand the questions and answers set forth herein, and the foregoing is a true and correct transcription of the proceedings had upon the taking of this deposition.

I FURTHER CERTIFY that I am neither employed by nor related to any of the parties or attorneys in this case, and that I have no interest whatsoever in the final disposition of this case in any court.

I FURTHER CERTIFY that I have retained the Original Copy of this deposition to seal and deliver to Mr. Marty R. Phillips, Esq.

WITNESS MY HAND AND SEAL this 20th day of November, 2017.

_____
SHERRY L. ROWE, CSR, CCR, RPR, RMR

MY COMMISSION EXPIRES: 3/22/2021

DEPOSITION OF

MICHAEL F. ARNALL, MD

10/19/17

CIVIL ACTION NO. 3:17-cv-060 DMB-RP

KELLI DENISE GOODE vs
THE CITY OF SOUTHAVEN, et al.

United States District Court
Northern District of Mississippi
Oxford Division

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